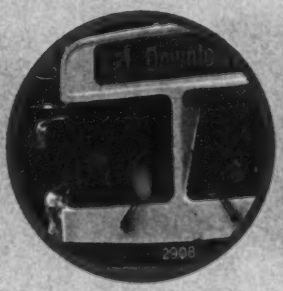
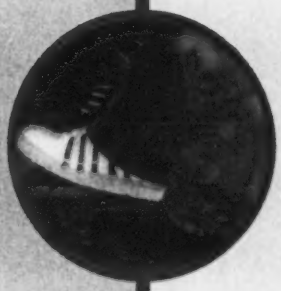
CITY OF VANCOUVER

Downtown Transportation Plan





Downtown Transportation Plan

Published Spring 2005
Downtown Transportation Plan
Implementation Team

Mayor's Preface

Year after year, Vancouver's citizens demand action to improve public transit, reduce traffic congestion and cut gridlock as top priorities for the city. . The Downtown Transportation Plan responds to that demand with a comprehensive and long-term plan to ensure our city remains a tremendous place to live. Sound transportation policy is a key pillar of our city's commitment to sustainability. Through careful planning, full public consultation and proper evaluation, we're taking important steps to make our city more livable. The Downtown Transportation Plan is a balanced approach. Every mode of transportation, including pedestrians, cycling, transit, goods movement and general purpose vehicular traffic, is given appropriate weight and consideration. The implementation of the plan is in its early stages, but our success in growing our town without growing more traffic is a sign we're on the right track. Thanks to all those who contribute to the Plans' success.

Larry Campbell
Mayor of Vancouver

Vancouver City Council, 2002-2005

Fred Bass
David Cadman
Jim Green
Peter Ladner
Raymond Louie
Tim Louis
Anne Roberts
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Ellen Woodsworth


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DON BAYER AWARDS FOR PLANNING EXCELLENCE

CATEGORY OF

INNOVATION

for

Downtown Transportation Plan

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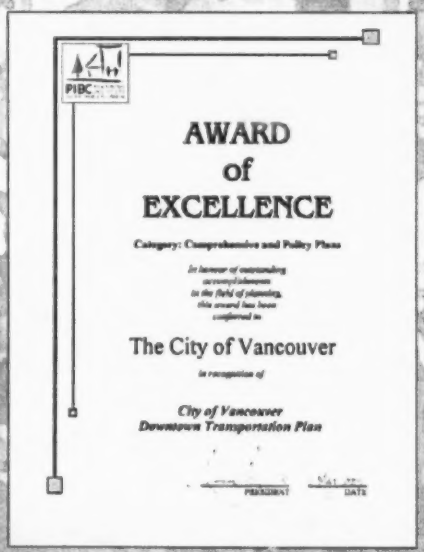

PIBC

AWARD of EXCELLENCE

Category: Comprehensive and Policy Plans

In honour of outstanding accomplishments in the field of planning, this award has been conferred to

The City of Vancouver

in recognition of

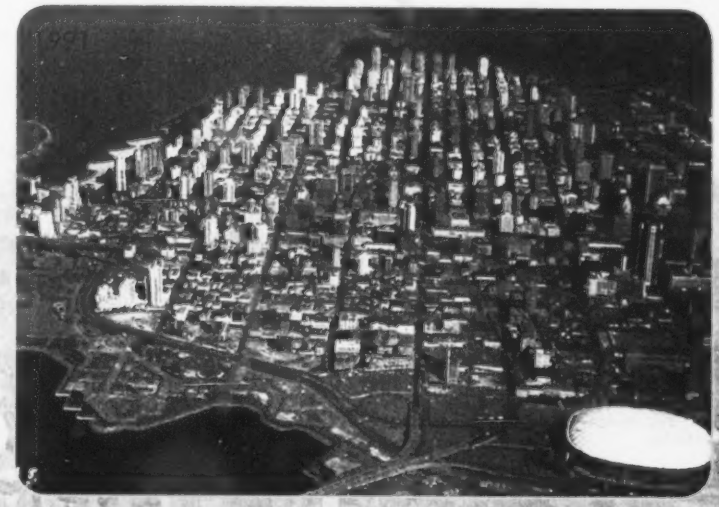
City of Vancouver
Downtown Transportation Plan

PRESIDENT DATE

Getting To and Around In One of the World's Most Livable Cities

Vancouver is regularly ranked as one of the world's most livable cities. Nature gave us a mild year-round climate and a stunning setting where sea and mountains meet. As Vancouver has grown and prospered, the City has carefully protected this enviable situation, which remains closely linked to our economic vitality. In the early 1990s, the City made "Living First" the priority for the downtown. Among other things, that meant not only making more land available for more people to live downtown closer to where they work, but also making sure that everyone can continue to get to -- and around -- downtown easily as it grows.

Living First is working. Today, Vancouver's downtown is one of the fastest growing and the second most densely populated city centre in North America, as well as a powerful economic engine for the Province of British Columbia. It's also the only major city on the continent without a freeway system in the city centre, a distinction that figures prominently in its livability. The Downtown Transportation Plan (DTP) is a comprehensive plan for making sure that Vancouver's city centre remains a thriving commercial centre and one of the easiest and most pleasant downtowns to get to and around in, whether you're walking, biking, taking transit, or driving. This Summary Report of the DTP highlights the changes that are coming to make it so.



Planning Evolution

The DTP is part of ongoing City and regional land use and transportation planning efforts that began more than a decade ago. While each effort or plan has a specific focus, each also builds on or complements the previous plans. All involve transportation, from encouraging people to live closer to where they work, to creating more sustainable transportation choices. The DTP focuses on the specific transportation needs of Vancouver's downtown peninsula within the context of plans for the City and the region. Vancouver City Council approved the DTP on July 9, 2002.

The Downtown Challenge

The current challenge for downtown is to accommodate more people travelling to, from, and within the City without adding traffic lanes to existing bridges and roads, and also keeping congestion to a minimum. It's a complex balancing act. Business vitality depends on easy access to work and stores for employees and customers – and delivering and receiving goods and services in a timely way. Livability depends on the quality of everyday life. Are the streets safe and pleasant for walking and cycling to work, shop, or play? Can people use transit to get where they need to go when they need to? How do we minimize traffic congestion to maintain access for business vitality and the appeal of everyday experience at the street level?

Planning Milestones

- Central Area Plan (1991) made "Living First" a priority for downtown.
- Transport 2021 (GVRD 1993) provided a long-term regional focus on transportation.
- Livable Region Strategic Plan (GVRD 1995) established regional strategy for growth.
- CityPlan (1995) established a vision of Vancouver's future through extensive public consultation.
- Vancouver Greenways Plan (1995) envisioned a network of safer, calmer, greener streets for pedestrians.
- Vancouver Transportation Plan (1997) established citywide transportation policies.
- Vancouver Transit Strategy (2002) confirmed short and long-term transit needs for Vancouver..

The Solution: Less Demand, More Choice

The heart of the DTP's solution is to reduce the demand for car trips by providing more transportation choices and thus minimizing congestion. The basic guideline is to create sustainable choices - that is, ones that serve current needs without compromising future needs.

A Downtown with Drawing Power

Vancouver's downtown has drawing power. With only 5 percent of the City's land area, the downtown now has 13 percent of its population, 39 percent of its jobs and 21 percent of its trip destinations. People want to live and work in the downtown. They also want to stay and play there. With more than half the region's hotel rooms, a thriving entertainment district, major convention facilities slated for expansion, the region's largest sports venues, and a cruiseship facility that attracts nearly one million passengers a year, Vancouver's downtown is a magnet for commerce, recreation, entertainment, and tourism.

New high rises and waterfront development have transformed the Vancouver skyline over the past two decades. More people are living downtown and they have reinvigorated the downtown's appeal for business, culture, and tourism.

Going Downtown Is a Matter of Choice

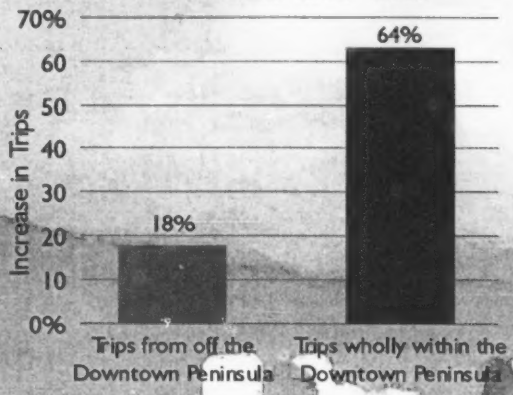
People in downtown Vancouver were already choosing to walk, bike, and use transit in greater numbers than anywhere else in the region more than a decade ago. Over the past 10 years, that trend has accelerated. Between 1994 and 1999 alone, walking to downtown destinations increased by more than 40 percent to account for almost one-third of all trips in the downtown. At the same time, overall bike trips and transit use in Vancouver rose, while car trips remained steady. The DTP supports these trends by making it even easier to choose to walk, bike, and ride transit downtown, while making sure there is enough road space for cars and trucks and delivering goods and services.

Population and Employment by Sub-Area, Metropolitan Core, 1996 and 2021

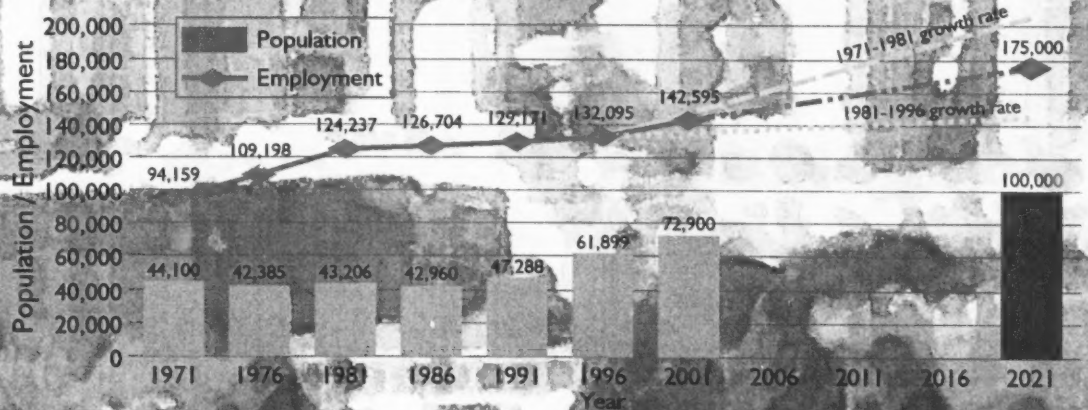
	1996 Population	1996 Employment
Downtown Peninsula	61,900	132,000
Central Broadway	32,000	57,600
False Creek Flats	0	5,000
Metro Core	93,900	194,600

	2021 Population	2021 Employment
Downtown Peninsula	100,000	175,000
Central Broadway	42,500	73,500
False Creek Flats	200	25,000
Metro Core	142,700	273,500

Projected Increase in Trips to Downtown Vancouver Destinations 1996 - 2021



Population and Employment and Targets in Downtown Vancouver



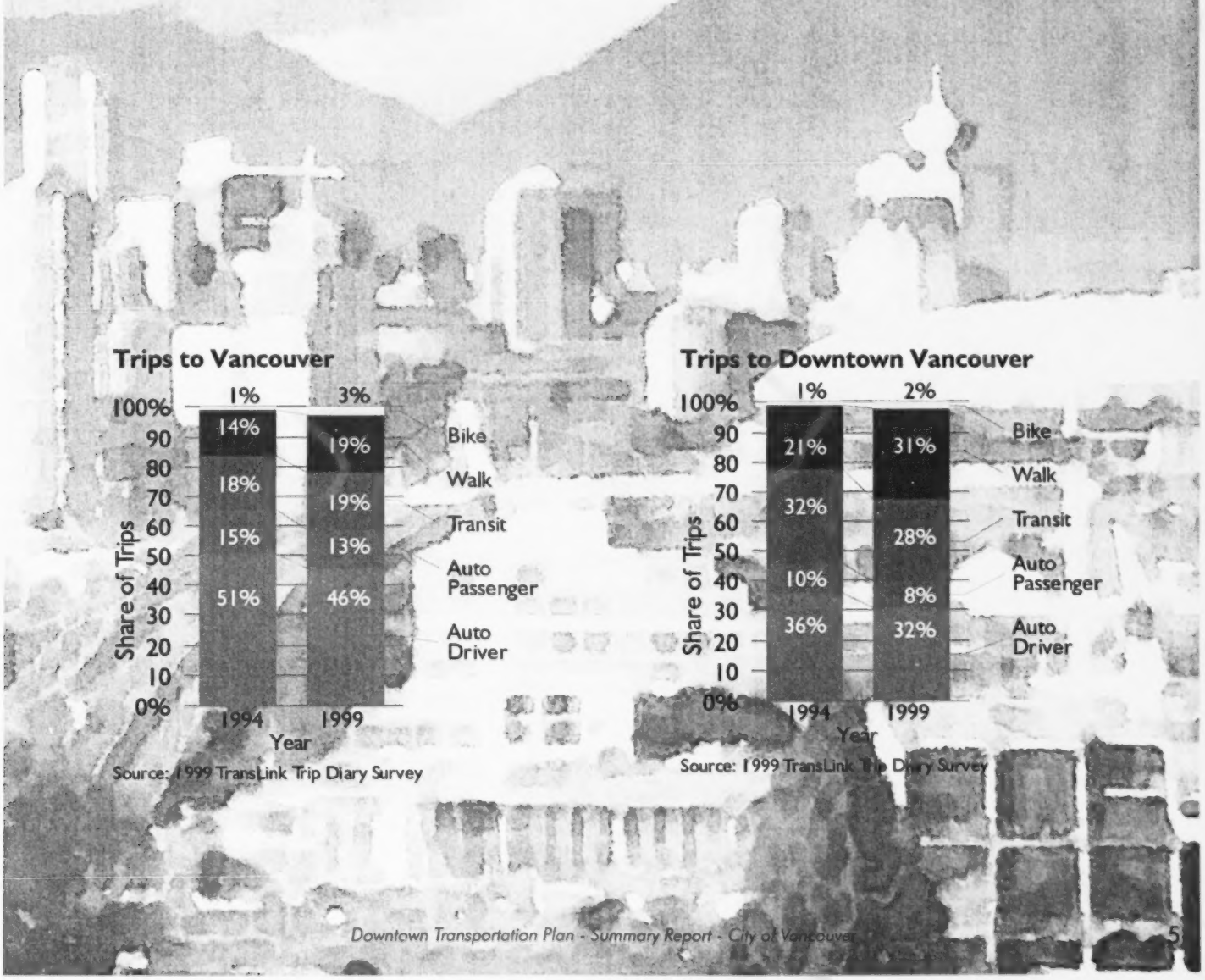
Our Growing Downtown Will Require More and Better Choices

People love living in Vancouver's downtown. The population here is almost 30 percent greater than central Toronto and three times that of central Montreal. Vancouver's downtown population grew by 54 percent from 1991 to 2001 – more than 1.5 times the growth in the downtown populations of such major cities as New York and Chicago. Projections call for 100,000 people – and maybe 110,000 -- to be living downtown by 2021, an increase of a further 37 percent.

The number of people working downtown is also growing. In 2001, it was estimated to be 139,000 – a more than five percent increase over 1996. The target for 2021 is for 175,000 people to be working downtown, or 25 percent more than in 2001. The DTP also anticipates that there will be an even larger increase – 64 percent – in people both living and working downtown. The number of downtown workers commuting from outside the downtown will increase by only 11 percent.

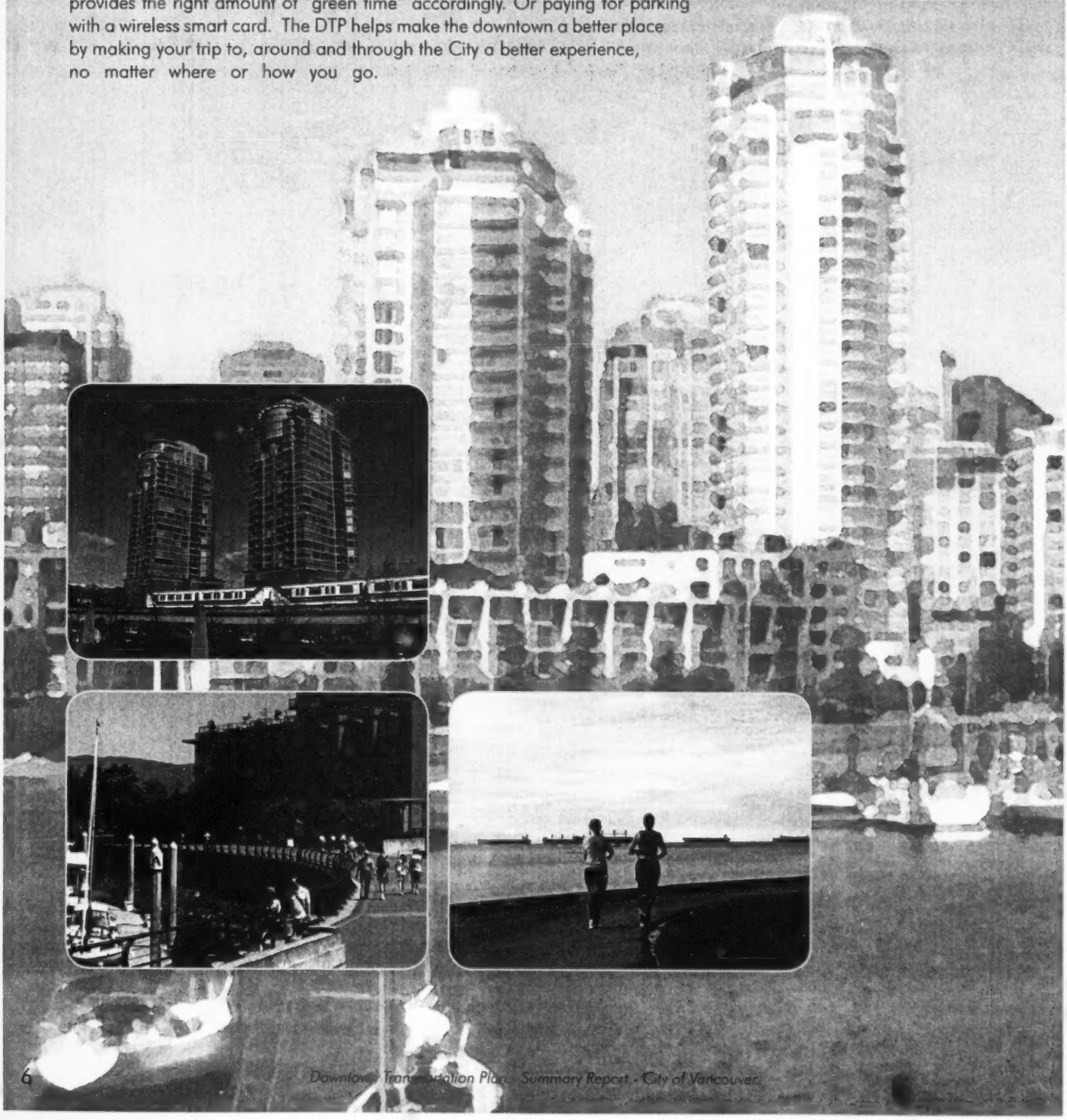
Maximum Accessibility, Minimum Congestion

If Vancouver is to maintain – and improve – our livability, all these new residents and workers will need to be able to get to – and around – downtown as quickly and easily as they can now. The DTP's answer is to make sure there are more and better opportunities for walking, biking, and taking transit to maintain maximum accessibility with minimum congestion.



Living the Vision

The Downtown Transportation Plan seeks to create a downtown where going places adds to rather than detracts from your experience of the City. Imagine being able to stroll all the way across town under a leafy canopy. The sounds of the city are muffled, the traffic is calmer – and so are you. Bringing your bike to work downtown on SkyTrain whenever you want, running a few errands during lunch on foot or on your bike, and then pedaling safely all the way home on a bikeway. Zipping to and from appointments, on a transit system that can take you just about wherever you need to go. Hopping on the streetcar to do a little shopping at your favourite shops in different parts of downtown. Having a low stress downtown driving experience with a traffic signal system that seems to always be tuned to traffic conditions and provides the right amount of "green time" accordingly. Or paying for parking with a wireless smart card. The DTP helps make the downtown a better place by making your trip to, around and through the City a better experience, no matter where or how you go.



Our vision ...

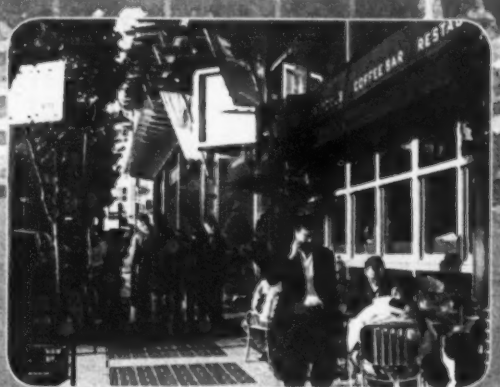
is for Vancouver to be the most livable city in the world.

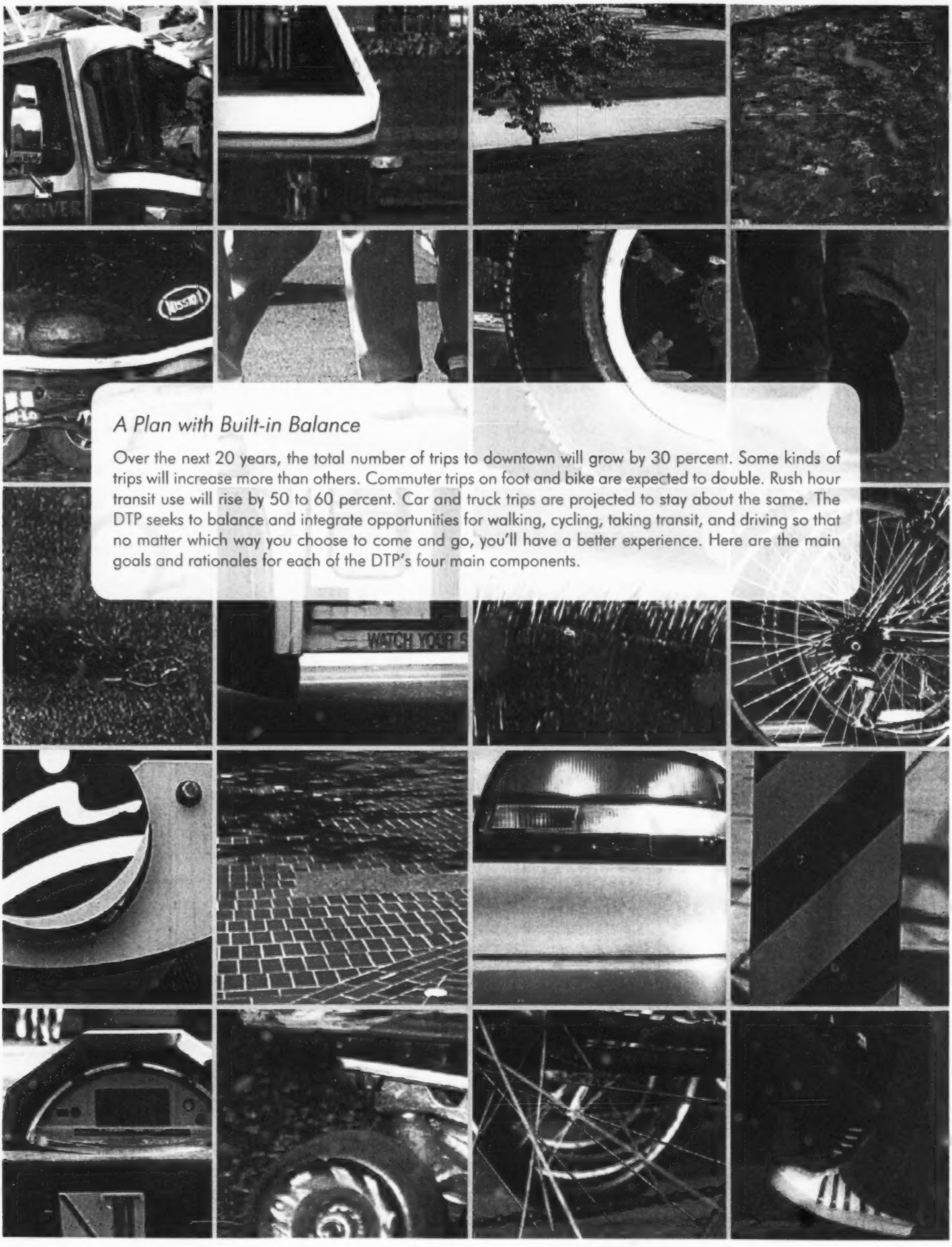
Our transportation vision ...

is for Vancouver to be the most accessible place in the region.

Livability depends in part on accessibility...

which depends on transportation choice.





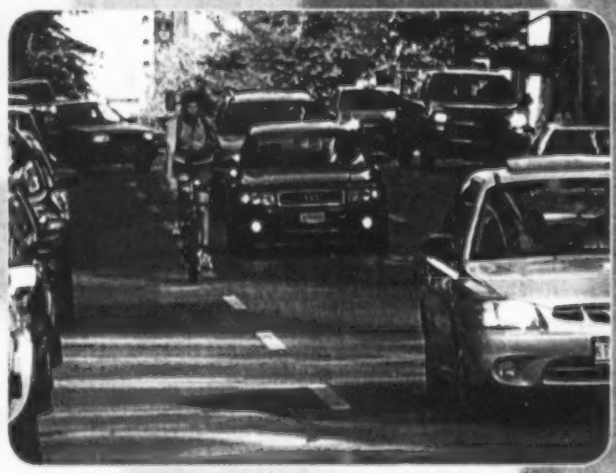
A Plan with Built-in Balance

Over the next 20 years, the total number of trips to downtown will grow by 30 percent. Some kinds of trips will increase more than others. Commuter trips on foot and bike are expected to double. Rush hour transit use will rise by 50 to 60 percent. Car and truck trips are projected to stay about the same. The DTP seeks to balance and integrate opportunities for walking, cycling, taking transit, and driving so that no matter which way you choose to come and go, you'll have a better experience. Here are the main goals and rationales for each of the DTP's four main components.

Walking. Make the downtown more walkable. It's already the preferred method for commuting for downtown residents and is expected to become even more popular as the downtown population grows to more than 100,000 by 2021 and as employment density increases. And there's no better way for visitors to get to know the City.

Cycling. Create a network of downtown bike lanes. Bike trips doubled from 1994 to 1999 and are expected to at least double again by 2021. More cyclists equal fewer cars, less congestion and cleaner air.

Transit. Create downtown transit routes that make it easy to get to and from existing and emerging neighbourhoods. Whole new neighbourhoods have sprung up over the past decade. Transit is also the number one choice for commuting to downtown. In fact, downtown relies on transit for access more than any other place in the region. Over the next 20 years, transit trips to downtown are expected to grow by 45 percent.



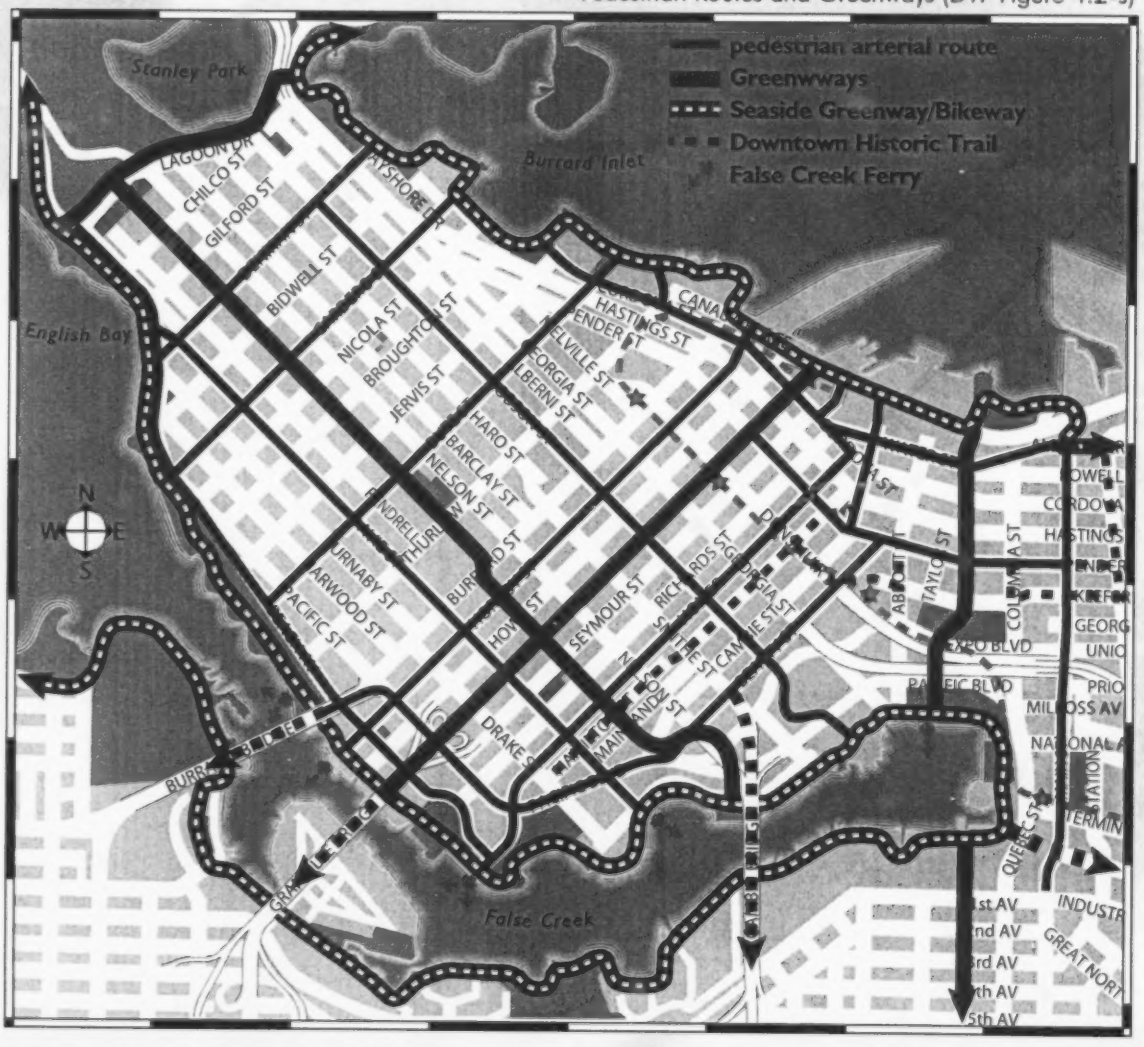
Road network. Minimize congestion by creating safe and sustainable management for traffic and the movement of goods. Business vitality depends on the flow of people and goods to and through the City. By offering more and better choices for walking, cycling and transit, the Plan can help reduce demand for driving even as the downtown grows. Adjustments to the existing road network will help keep cars and trucks moving efficiently.

People may be driving or taking transit more elsewhere in the region, but in downtown Vancouver, they're walking more. A lot more. More than half of the people who live downtown also work downtown, which is also the region's largest employment center. Their preferred method of commuting is on foot – and even those who take transit or drive often start and end their trips on foot. Walking is expected to become even more popular as the downtown population grows.

That's a natural choice. Downtown is relatively compact – 550 hectares (1,400 acres), or about 1.4 times the size of Stanley Park. So residents and visitors alike can pretty much walk wherever they want to go. Shopping. Parks. Libraries. Theatres. Clubs. Or just visiting friends. Since the climate is mild, the scenery is beautiful, and the streets generally safe and clean, walking in Vancouver is both highly practical and pleasurable.

The DTP Pedestrian plan aims to make walking in Vancouver an even more appealing experience for both residents and visitors. There's no better way than walking to get to know a city – and the DTP envisages making Vancouver into one of the great walking cities of the world.

Pedestrian Routes and Greenways (DTP Figure 4.2-J)



The DTP's proposed expansion of pedestrian connector routes and greenways will make walking through and around the City far easier. Wherever you want to walk to – a different neighbourhood, your favourite park, a community centre, a bus stop, or SkyTrain station – you'll usually be able to get there directly on foot. You'll also be able to do it quite comfortably and safely.

Some of the routes will be greenways, street canopied in green and buffered from the sounds and stresses of downtown. These interconnected greenways will let you walk or cycle the length and breadth of downtown – or all the way around it – in relative calm, insulated from the noise and pace of busier streets. You will have more places to sit in the shade and watch the world go by – and more public art to engage the imagination. Water fountains will refresh you on your way – and signage and lighting geared to the needs of walkers and cyclists will help you find your way more easily.

Other improvements that will make journeys on foot safer and more pleasant are wider sidewalks and awnings and canopies that offer more weather protection. Bulges at corners will make it easier for drivers to see pedestrians and will reduce the time it takes to cross the street. Redesigned intersections, rear lane crossings and better access for people using wheelchairs and scooters and those with sight and hearing impairments will make crossing easier and safer. A wayfinding system for walkers, whether they're residents or visitors, will make navigating the city on foot much clearer. Downtown aims to offer great walking for everyone.

Wider sidewalks

Corner bulge

Mid-block crossing

Seating and shade

Think of your favourite street – besides the one you live on. Is it a broad boulevard lined with imposing buildings? A busy street lined with shops and sidewalks filled with shoppers? A scenic stretch with stunning views? An older route with historic sights? These are all great streets. The DTP aims to protect and enrich Vancouver's great streets.

We have many different kinds of streets. Some, like Burrard or Georgia Streets, are parade routes, places where we gather to stage celebrations and ceremonies.

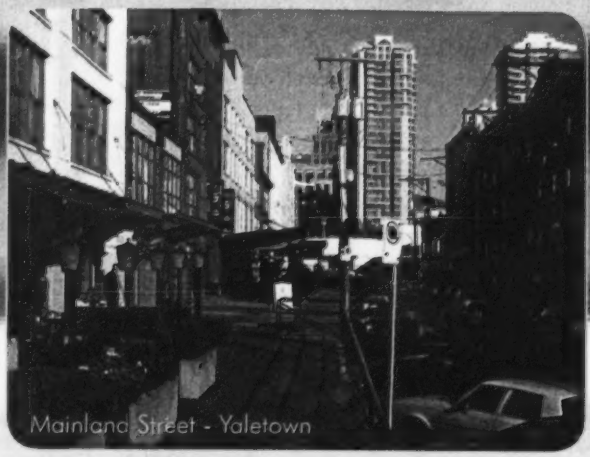
Others, like Davie, Denman, Robson, and Granville Streets are magnets for shoppers and fun seekers. They have the shops, restaurants, and businesses that make each one the commercial heart of their district.

There are the streets like Water, Mainland, and Hamilton that hold our historic places and memories and tell the story of Vancouver. There is also the Silk Road in Chinatown, a heritage route that overlays a number of streets, including Pender and Keefer. Other heritage routes - all together they are called the Downtown Historic Trail - will supplement the Silk Road and connect the heritage precincts of Chinatown, Gastown, and Yaletown.

And then there are streets with stunning scenery – like Beach Avenue -- that people walk, cycle, or drive just for the experience.

They're all great streets. And together, they are a great way to experience Vancouver.

Each of our downtown's great streets is a thread in the tapestry of the City's life. Individually, each brings a distinct character and flavour to the downtown. Collectively, they form a network that lets people experience the essence of Vancouver at their own pace and according to their own preferences. The DTP formally identifies the streets that make up this tapestry and proposes, through design and attention to details, to make them a memorable experience for all who use them.


Mainland Street - Yaletown

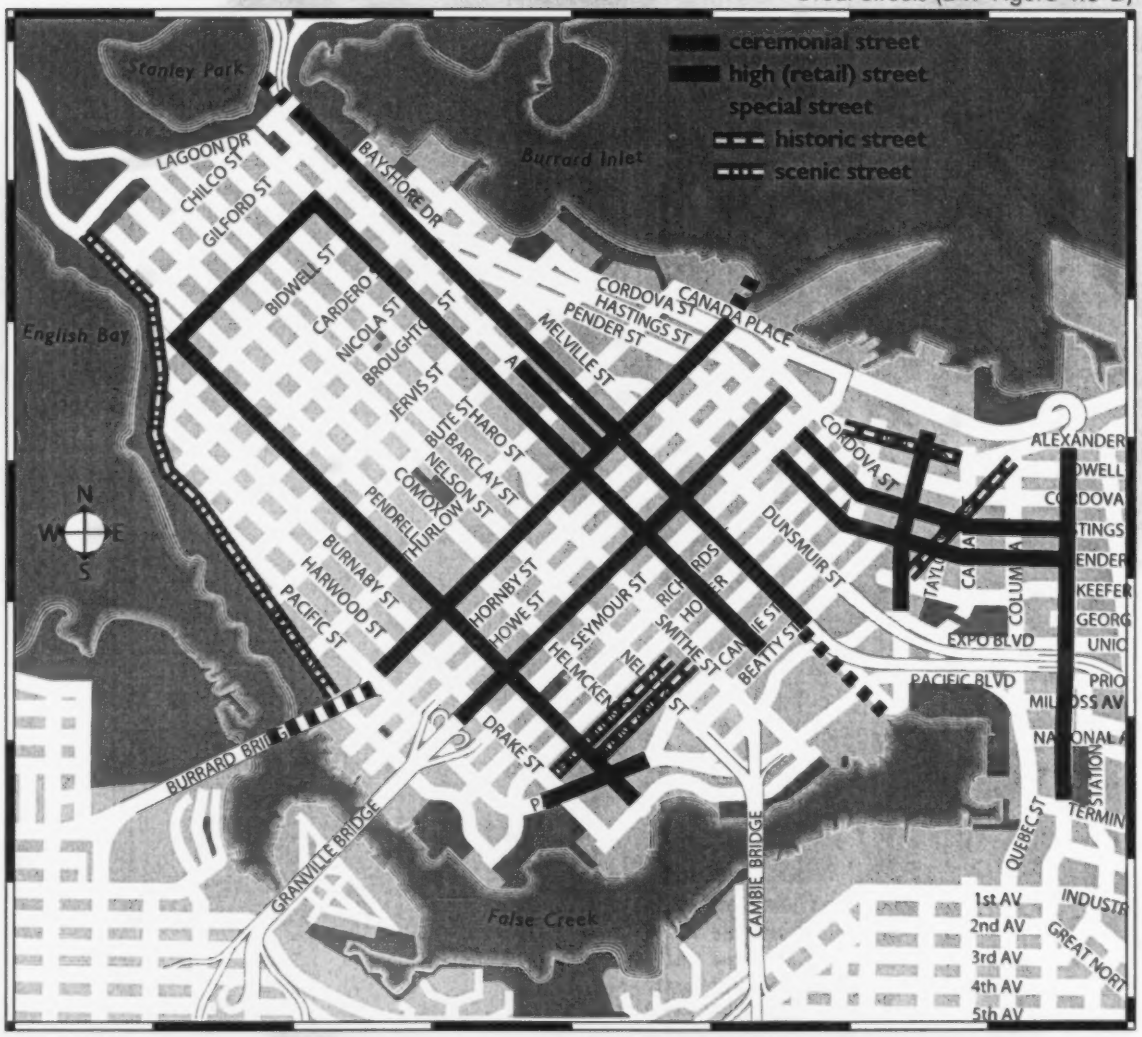
Granville Street


Robson Street

Burrard Street

Georgia Street

Great Streets (DTP Figure 4.3-D)



More Transit is Better

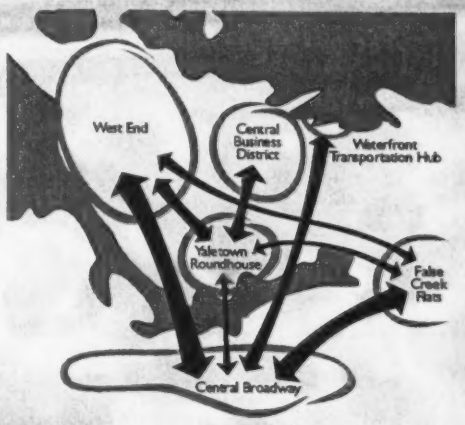
With transit trips to downtown projected to double over the next 20 years, the DTP supports the seamless integration of the different ways people take transit to downtown – trolley or diesel bus, streetcar, SkyTrain, SeaBus and West Coast Express. With transit ridership wholly within downtown expected to rise by 85 percent in the morning rush hour (mostly on local bus routes) in the same period, the DTP also seeks to ensure downtown transit routes make it easy to get around within the City's core.

Vancouver developed the DTP in consultation with TransLink, the regional transportation authority responsible for the regional transit system. While the DTP assumes that transit supply will grow to meet the increased demand for transit, it also has built in flexibility to accommodate changes in how transit services are delivered.

Waterfront Station is the main downtown hub where all modes of transit converge. SkyTrain, buses (diesel or trolley), streetcars, the SeaBus, and the West Coast Express will come together here to let transit riders change modes to get where they need to go with minimum fuss.

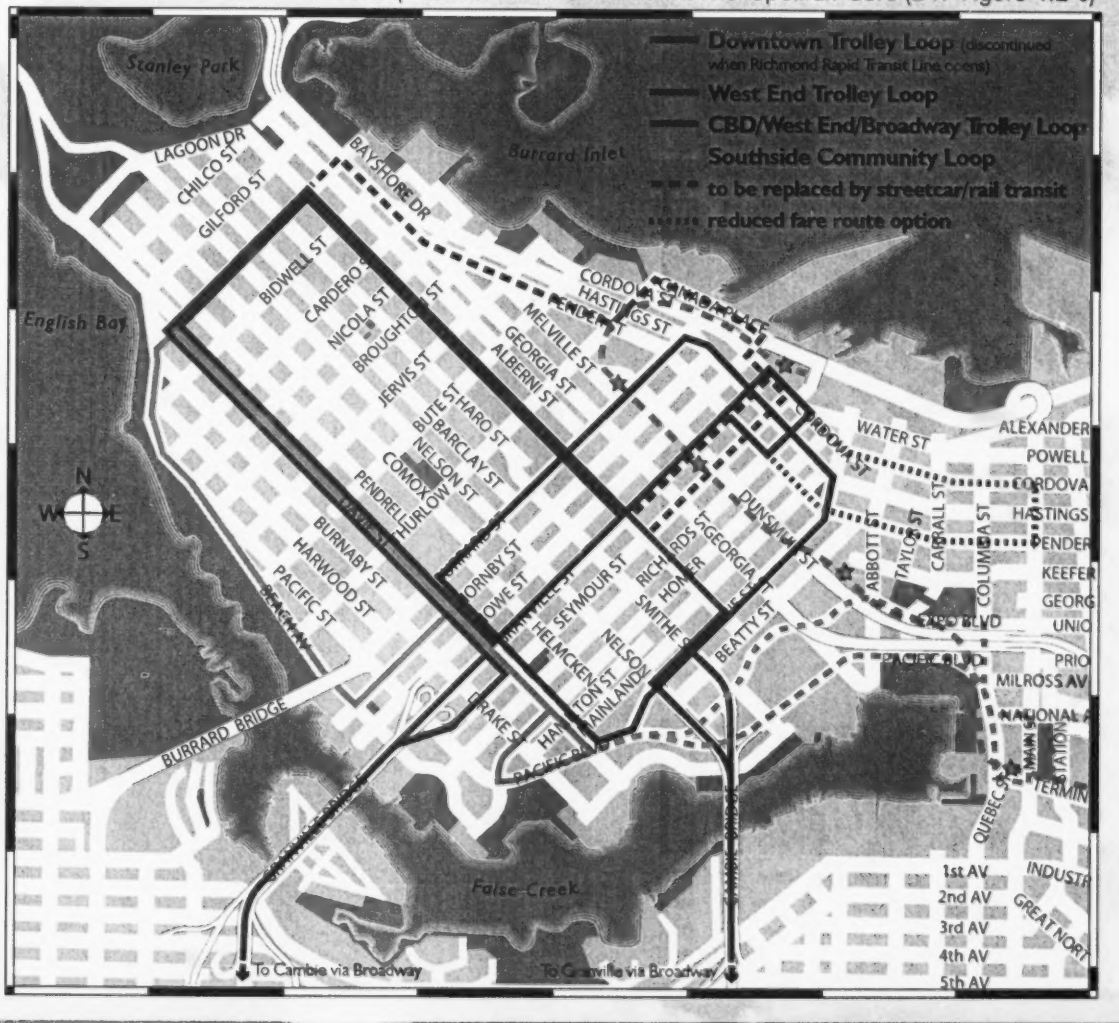
The Expo SkyTrain line – an immediate success upon opening in 1985 – and the West Coast Express carry half of all transit trips to downtown. The expansion of rail rapid transit is expected to double the number of inbound morning rush hour trips to 16,000 per day.

While it's now fairly easy to take transit to get to the central business district from elsewhere in the region, it can be a trying experience to take transit within the metropolitan core, which includes downtown, Central Broadway and False Creek Flats. This is where most of Vancouver's jobs are now – or will be in the future. The DTP calls for much better connections between these areas – and between the popular – and densely populated – neighbourhoods in the West End and Downtown South and Central Broadway. Where possible, quiet, non-polluting electric trolley buses will provide these new and better connections. The Area Transit Plan being prepared by TransLink and the City further explores how to bring these proposed new services on line.



These are the bus routes that the DTP envisions for providing better transit services throughout the metropolitan core. Some will be delivered by bus at first and later through the streetcar or rapid transit. All will involve additional consultation, analysis, and detailed route planning with TransLink.

Conceptual bus routes to serve the Metropolitan Core (DTP Figure 4.2-J)

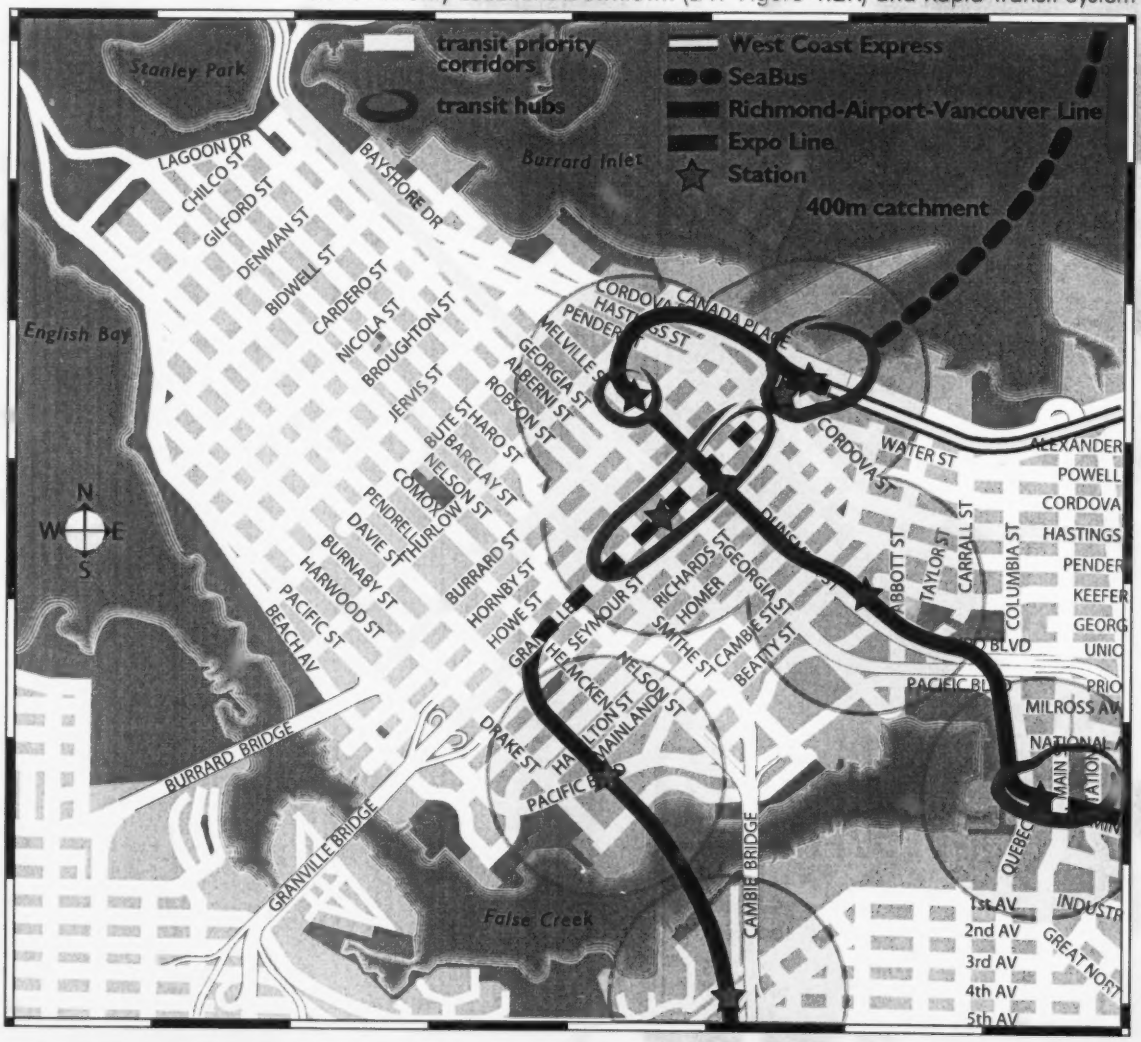


Just as walking, cycling, or driving takes precedence in some places in downtown, transit will be the priority in others. Transit priority is especially important at the primary downtown transit hubs, Waterfront Station and the Granville Mall, where buses and other transit modes come together. Smooth integration of services at these hubs makes it easier to get where you need to go – and easier to choose transit over driving.

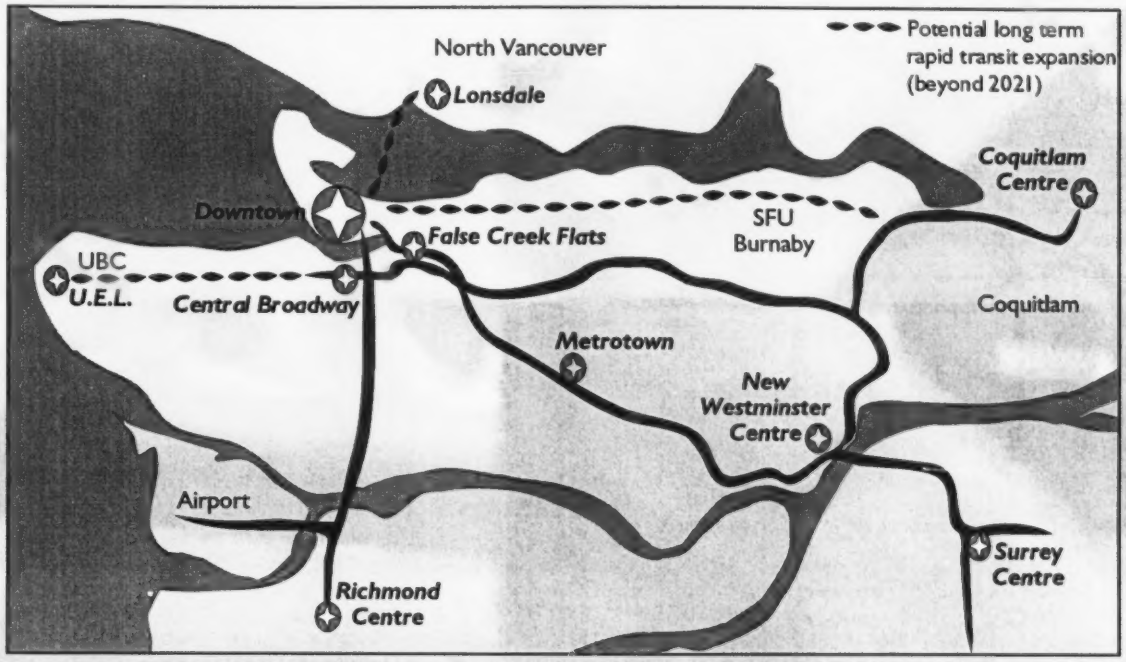
Rapid Transit to and in Downtown

The expansion of rail rapid transit is expected to double the number of inbound morning rush hour trips to 16,000. In fact, rapid rail transit is expected to carry 90 percent of new non-pedestrian and bicycle trips into downtown between 1996 and 2021. The questions are how, where, and when rail rapid transit will expand – and where and how it will integrate with downtown's transit network. TransLink and the City will work together to provide the answers. The map below illustrates possible alignments and routings through the downtown, with new stations providing easier access to rapid rail transit across downtown.

Transit Priority Locations Downtown (DTP Figure 4.2K) and Rapid Transit System



In 1984, Greater Vancouver had no rapid transit. Today, the Expo SkyTrain line – an immediate success upon opening in 1985 – and the West Coast Express carry half of all transit trips to downtown. Anticipated future developments will only further enhance access. Beyond 2021, the Greater Vancouver region could have a system stretching from Coquitlam in the east to UBC in the west, and from Richmond in the south to North Vancouver. The downtown will be the most accessible place in the region.



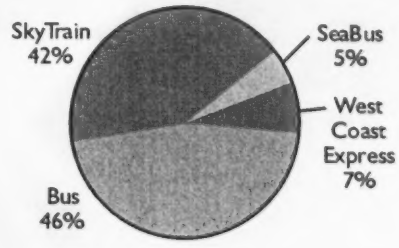
Downtown Rapid Transit Terminus and Future Expansion (DTP Figure 4.2H)

Rapid Transit's Future

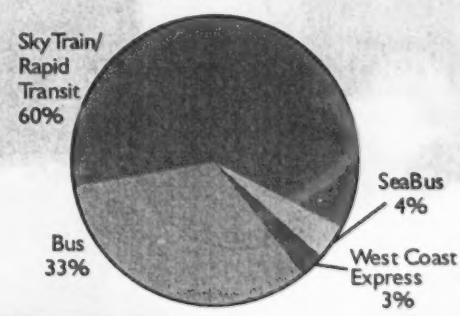
There is no question that rail rapid transit will be needed to bring more people downtown over the next two decades. It is expected to carry 90 percent of new trips into downtown between 1996 and 2021. The questions are how, where, and when rail rapid transit will expand – and where and how it will integrate with downtown's transit network. TransLink and the City are working together to provide the answers.

Transit AM Peak Hour Trips

Transit AM Peak Hour trips to downtown - 1996 Total Trips: 17,000



Projected AM Peak Hour transit trips to downtown - 2021 Total Trips: 26,000



Source: Downtown Transportation Plan Sub-Area Model

A Streetcar for Downtown (Again)

If you have ridden streetcars – sometimes called trams -- in other cities, you know how pleasant and practical they can be. Vancouver once had a streetcar system that crisscrossed the city until it was dismantled in favour of our current trolley bus system. Today, the quickness and efficiency of the modern streetcar is helping it make a comeback in downtown Vancouver, where it could link a number of areas that are too far apart for many to walk comfortably. The streetcar promises to be especially popular with visitors because it will link many of the City's tourist attractions.

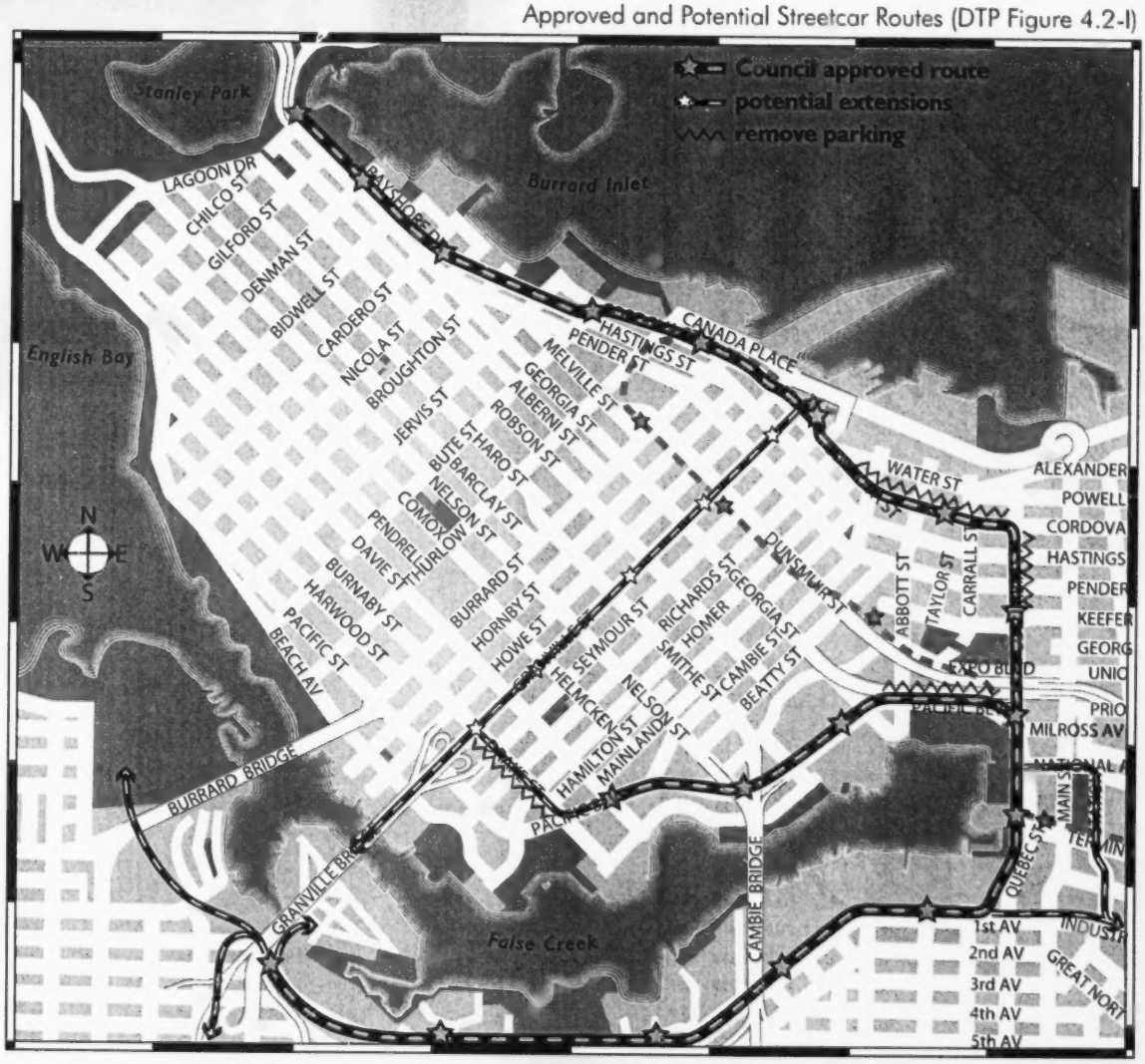
The streetcars being considered for the new downtown streetcar service represent the state of the art in people moving in downtown centres. Vancouver's next generation streetcars will be sleeker, faster, and more spacious than those that once travelled the city's streets and they will move more people, more quickly, more safely. The streetcars shown here are a good example (from North American and European cities) of the level of design and style that you can expect to see in Vancouver's new generation of streetcars.

The DTP calls for Vancouver to get a new streetcar service that will take you from one end of downtown to the other – and almost all the way around False Creek – and let you connect with all the other transit services.

The initial streetcar line is proposed to run from the south end of the Granville Street bridge around False Creek (with a spur to the heart of Yaletown), across the neck of the downtown peninsula to Cordova and right along the waterfront all the way to Stanley Park. Potential extensions could include a line up Granville Street with links to both sides of False Creek and Vanier Park. The initial streetcar routing will provide service to growing new neighbourhoods, as well as provide links to transit hubs at Waterfront and Main Street SkyTrain Stations and the Granville corridor.

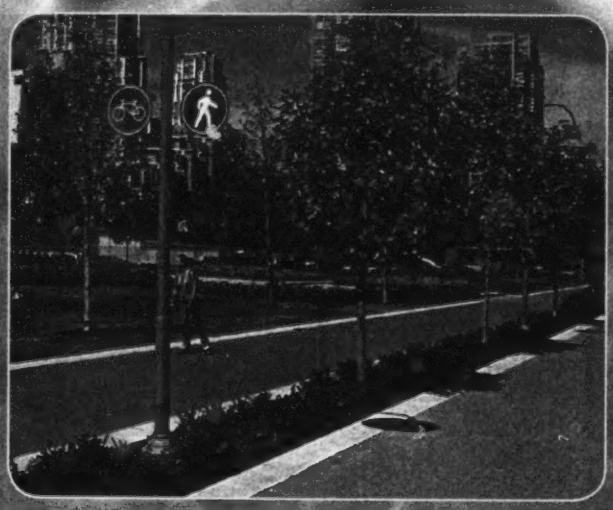
The new system will expand the successful demonstration line along False Creek South along corridors that have been preserved for a new streetcar line. The DTP calls for a separate right of way to free the system from road congestion wherever possible, which would make riding the streetcar both more efficient and more appealing.

Approved and Potential Streetcar Routes (DTP Figure 4.2-I)



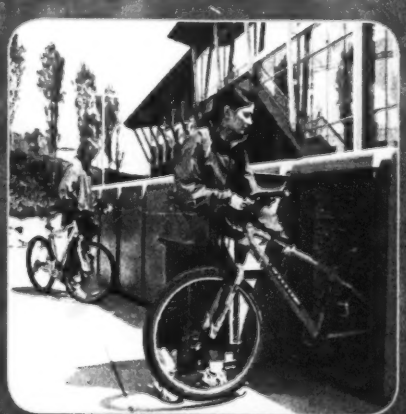
Bike trips currently make up only 2 percent of all trips into the downtown. That's 8,000 trips, which is the equivalent of 230 buses on Granville Mall in rush hour, or more than the number of people crossing the Lion's Gate Bridge at rush hour. With estimates indicating that cycling will double again by 2021, the DTP will make more room for more cyclists in several ways.

Expanding existing bike lanes and bikeways to create a 25-km cycling network will provide direct connections to key destinations in and around downtown, like the central business district, and to bridges, the Seaside Bike Route, and other bikeways that link to the rest of the City. Where no bike lanes are proposed, re-built or re-striped arterial streets will widen curb lanes to make more room for cyclists. The focus will be on balancing the creation of new bike lanes with the needs of other street uses.



Some of the other elements that will make biking much more attractive, safe and comfortable for riders:

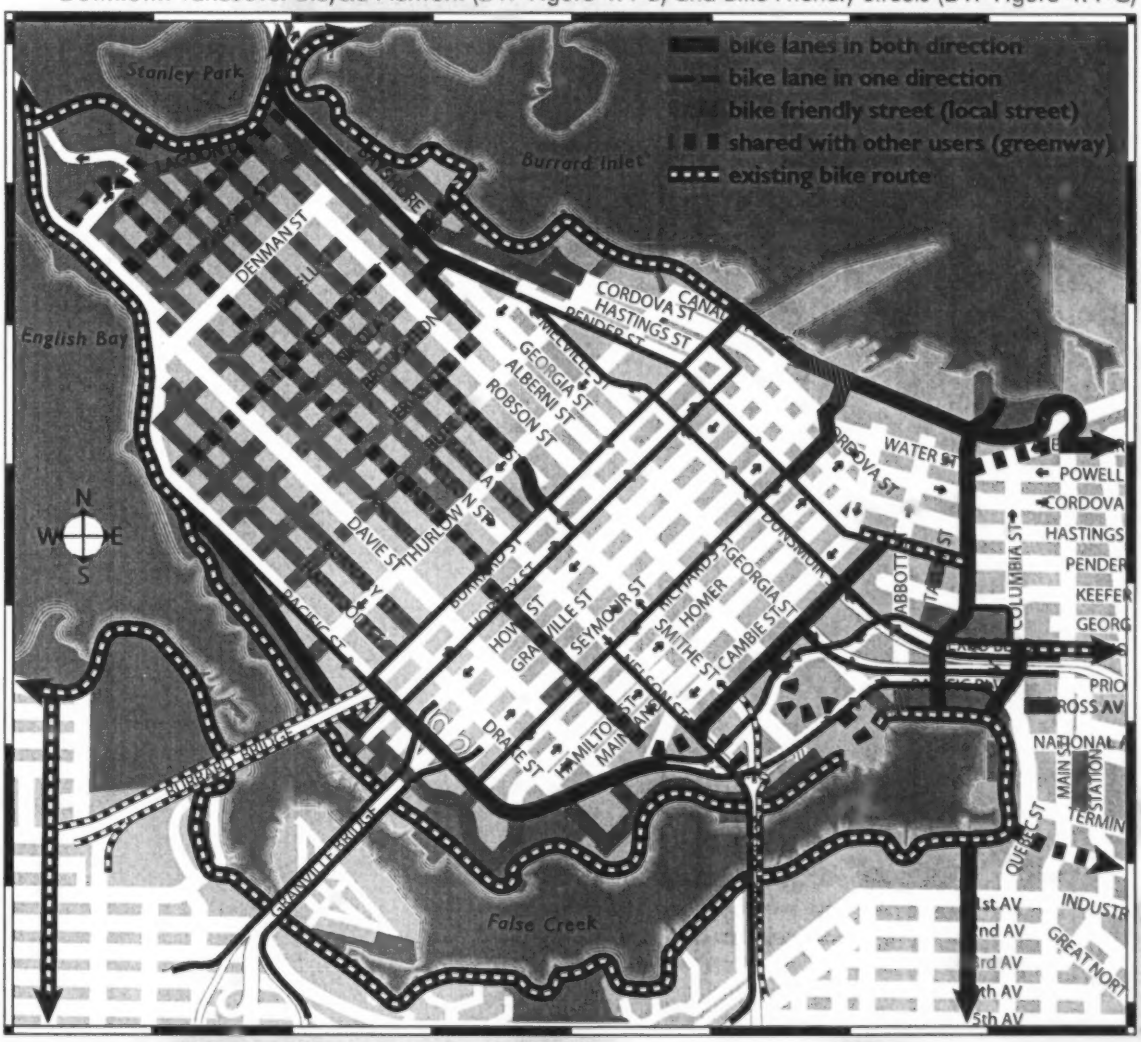
- Racks for bikes on buses and SkyTrain gives cyclists more commuting options – and encourages more cycling.
- Storage lockers give cyclists more flexibility and security in making the choice to get out of the car. They know their bikes will be there when they need them.
- Easy to read signs specifically for cyclists make it easy for them to find the safest way to their destination.



Cycling downtown in the future will be safer and more convenient. Cyclists can expect to see more bike lanes. Research has shown that bike lanes reduce bicycle collisions by 35 to 50 percent. The DTP calls for lanes that are a minimum of 1.5 metres wide and next to the curb or full time parking. The DTP also envisages making cycling more convenient with more racks and lockers for bikes, signage to help cyclists find their way, and more opportunities to bring a bike on transit. TransLink, the regional transportation authority responsible for the regional transit system, will replace the existing local trolley buses with new ones equipped with bicycle racks. Most diesel buses already have bike racks.

The bicycle network that the DTP recommends for the downtown peninsula includes 25 km of bike lanes. Relatively low in cost, the network is designed to have minimal impact on other road users.

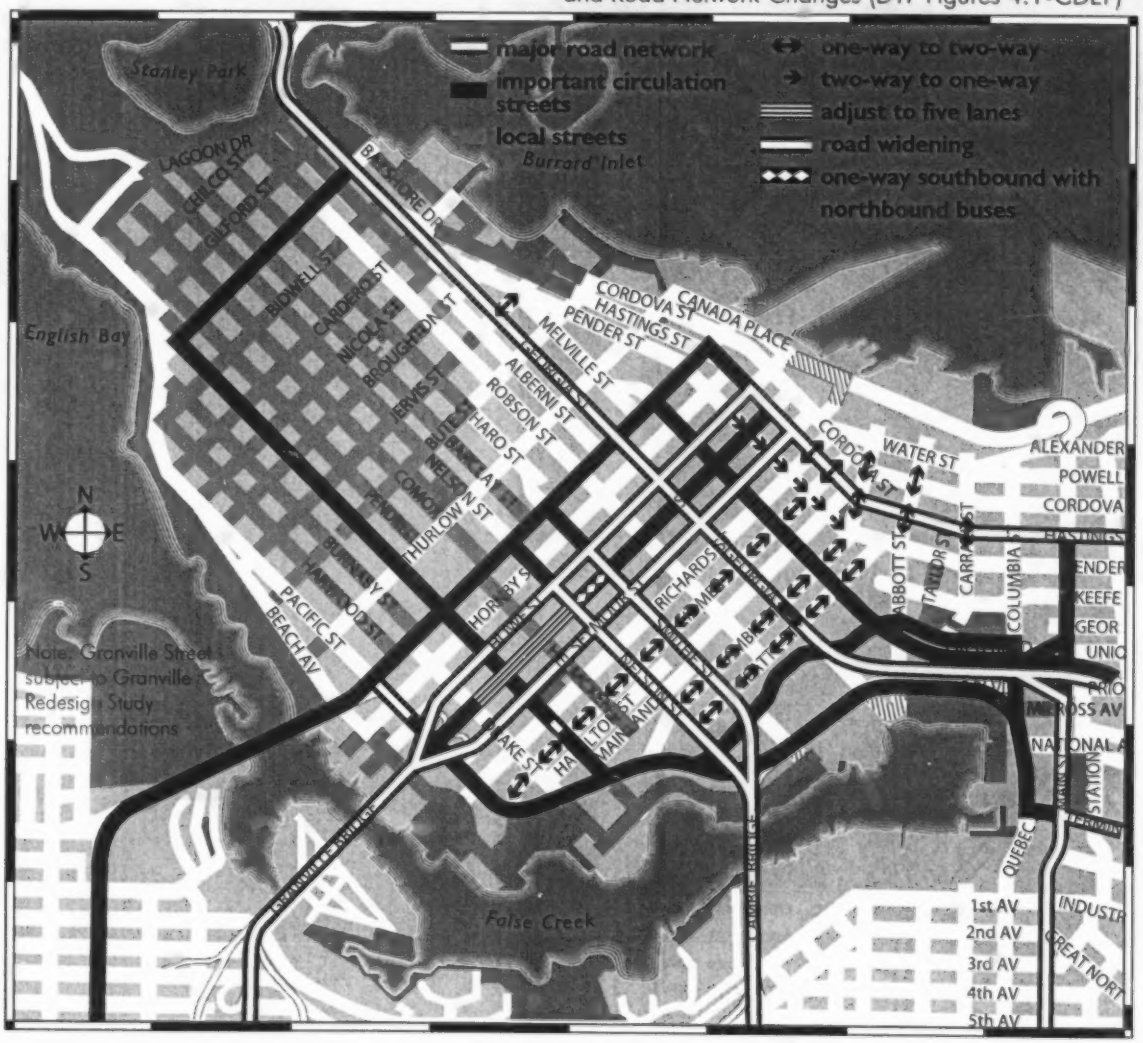
Downtown Vancouver Bicycle Network (DTP Figure 4.4-B) and Bike Friendly Streets (DTP Figure 4.4-C)



Downtown's roadways form a true network, not just a patchwork of streets. Each type of street plays a specific role. Major roads keep downtown connected with the rest of the region. Circulation streets link different parts of downtown and meet residents' and businesses' needs for access. And quieter local streets can provide a sense of calm that invites leisurely walking. The DTP balances and integrates these different functions in ways that promote livability while supporting the flow of commerce in and through the downtown.

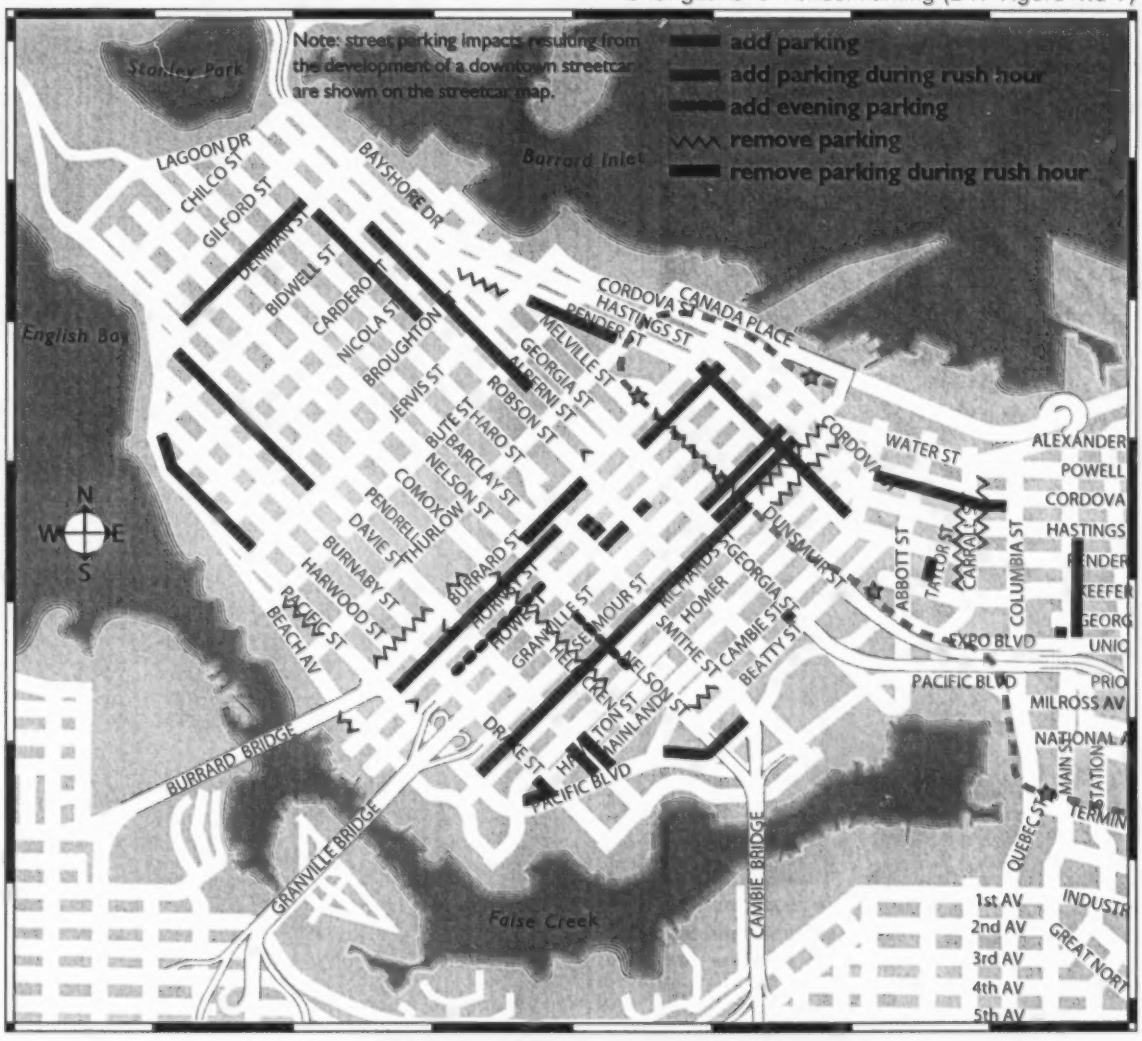
As more people come to live and work downtown, they will generate more trips to and within downtown. New opportunities for walking, biking, and taking transit will reduce demand for driving, but will also compete for space on the existing road network. The answer is not to build more roads - which reduces congestion in the short term while inviting more drivers - but to make the existing road network even more efficient, while providing more incentives for carpooling, and ride and car sharing so people can leave their cars at home.

Downtown Major Road Network, Important Downtown Circulation Streets, Local Streets and Road Network Changes (DTP Figures 4.1-CDEF)



Managing parking supply is one of the few areas that the City of Vancouver can exercise full control in order to encourage commuters to choose transit, bicycling, or walking over driving. High costs and low availability will reduce demand for parking; low cost and high availability will increase it. Overall, the DTP's on-street parking proposals would see little or no net change in the total number of parking spaces and the net addition of approximately 570 spaces during rush hours. If developers build the maximum number of spaces the current parking by-law allows, downtown Vancouver will have 54,000 parking spaces by 2021. While this represents an 8 percent increase over 2000, it is actually a tightening of overall supply. The total overall number of commercial spaces per employee would drop from 0.44 in 1990 to 0.32 in 2021. The DTP further recommends a review of commercial and residential parking standards, as well as policies that permit the development of free-standing garages in parts of downtown.

Changes to On-street Parking (DTP Figure 4.6-F)



The quality of a city's public realm – the shared spaces that people use to get around, to meet, to play, to celebrate, and to shop – plays a key role in its livability. As walking and cycling become the most common ways of getting around downtown, creating a public realm experience that makes walking and cycling more pleasant will make the city centre even more livable.

The popularity of the Seawall around Stanley Park and the new waterfront neighbourhoods is a prime example how a public realm improvement can improve the downtown experience. The redesign of Pacific Boulevard is another.

The DTP recommends developing a strategy and work program for undertaking a downtown public realm plan. It will include designing streetscapes that make ceremonial and commercial streets even more appealing, creating more greenways and parks, and making it easier for people to find their way around the city centre. It will also guide the creation of more venues for public events in downtown Vancouver, as well as producing guidelines for improved uses of existing public spaces.

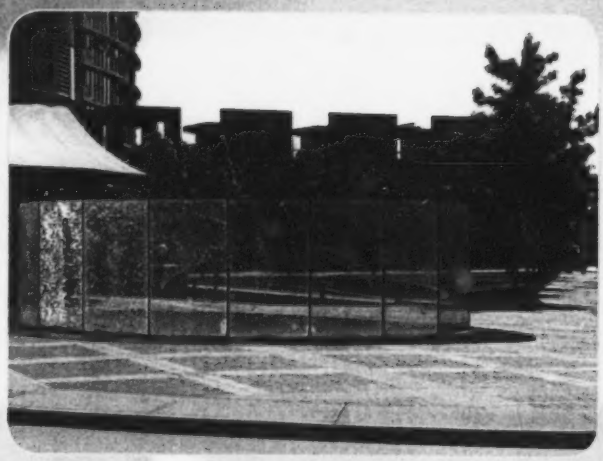
The elements forming our public realm are diverse and not always obvious. Understanding and celebrating important places, routes and activities, while emphasising quality and a human scale are important parts of an overall public realm strategy. These images show some of the elements we value.

activity in the day...

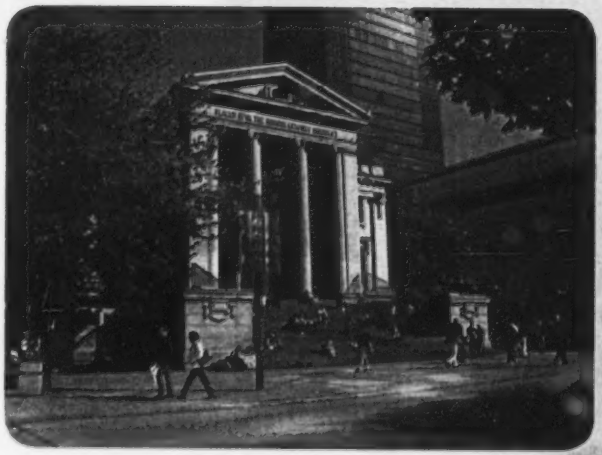
...activity at night

places for gathering, places for entertainment

pedestrian comfort - trees, weather protection, lighting



public art



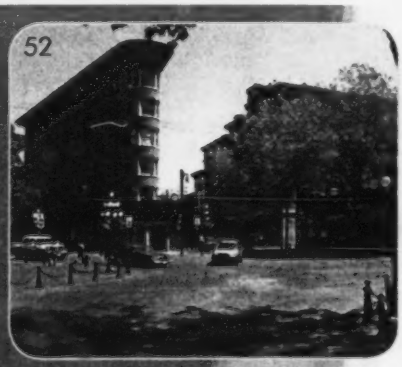
landmarks and heritage

As the DTP evolved, public input, safety studies, and staff identified specific places and potential ways for putting into practice ideas for improving the experience of walking, cycling, taking transit, and driving in the downtown. All told, the DTP suggests more than 50 individual "spot improvements" that, when taken collectively, could work together to improve access and minimize congestion. They range from improving bike and pedestrian crossings and widening sidewalks to changing street parking regulations, enhancing transit hubs, and redesigning intersections.

Locations of Spot Improvements (DTP Figure 5-A)

Spot Improvements

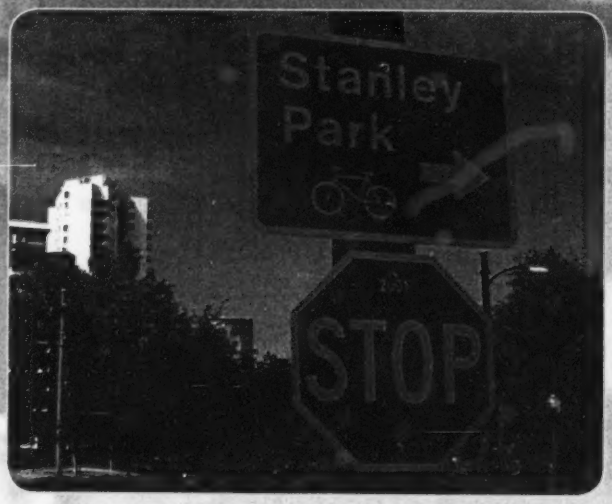
1 Normalize the intersection of Morton Avenue at Beach Avenue
2 Explore options for Morton Avenue to enhance landscaping
3 Improve pedestrian and cyclist crossing of Beach Avenue at Bidwell Avenue
4 Redesign the intersection of Pacific Street and Beach Avenue
5 Extend the Beach Avenue Off-Street Bike Route from Bidwell St to Hornby St
6 Improve the Seaside Route for cyclists under the Burrard Bridge
7 Improve the Seaside Route for cyclists at Hornby and Howe Streets
8 Improve Seaside Route connection to Burrard Bridge for cyclists
9 Improve the crosswalks on the Granville Bridge at the Seymour and Howe ramps
10 Improve the crosswalks on Pacific Street under the Granville Bridge
11 Redesign the Granville Bridge Loops
12 Redesign the intersection of Pacific St and Burrard Street
13 Widen Pacific Street between Burrard and Hornby Street
14 Redesign the intersection of Pacific Blvd at Davie Street
15 Redesign the intersection of Pacific Blvd at Cambie St
16 Improve pedestrian and cyclist access through Helmcken Park between Mainland and Pacific
17 Redesign Helmcken Street as a pedestrian and cyclist friendly greenway
18 Create a cyclist connection between Helmcken and Comox across Burrard St
19 Enhance the crosswalk on Comox St across Thurlow St
20 Widen sidewalks on Davie Street using building setbacks
21 Improve the streetscape and pedestrian environment on Thurlow Street
22 Create a southbound bike lane on Burrard Street
23 Remove parking on Burrard between Nelson and Robson in the PM peak hour
24 Enhance the crosswalk on Smithe Street at Haro Street
25 Remove parking westbound on Davie Street between Burrard and Hornby
26 Create a bike lane on Hornby Street from Pacific to Hastings Street
27 Adjust the intersection of Hornby Street at Hastings Street to accommodate a cyclist left turn
28 Change the parking access ramps on Howe Street between Georgia Street and Smithe Street
29 Widen sidewalks on Granville Street between the Bridge and Nelson Street
30 Prohibit general traffic northbound on Granville Street between Nelson Street and Smithe Streets
31 Route the Pacific Boulevard Streetcar line along Drake Street to Granville Street
32 Create a southbound bike lane on Richards Street
33 Convert Homer Street to a two-way street
34 Create a direct pedestrian connection between Hamilton Street end and the intersection of Hamilton between Nelson and Smithe
35 Create a northbound bus lane on Cambie Street from Nelson Street to Smithe Street
36 Integrate the Northeast False Creek development into the downtown by extending the street grid into the site
37 Improve pedestrian and cyclist continuity through the Plaza of Nations
38 Modify the intersection of Pacific and Quebec to better accommodathe the streetcar and cyclists
39 Facilitate cyclist connection through the Science World area
40 Improve cyclist access through the intersection of Prior Street and Gore Avenue
41 Improve crossing conditions for cyclists crossing Gore Avenue at Union Street
42 Normalize the intersection of Georgia and Pender Streets
43 Prohibit southbound access onto Jervis Street from Pender Street
44 Enhance the streetscape on Bute Street between Robson Street and Cordova Street
45 Enhance the crosswalk on Dunsmuir at Melville (mid-block crossing)
46 Create a westbound bike lane and widen the traffic lanes on Dunsmuir Street
47 Create an eastbound bike lane on Pender Street and provide loading zones
48 Redesign Hastings Street between Burrard To Bute to eliminate the narrow traffic lanes
49 Improve conditions for pedestrians on Hastings Street between Main Street and Cambie Streets
50 Redesign Cordova Street in front of Waterfront Station to enhance the transit hub
51 Create a streetcar route on Cordova Street between Bute Street and Columbia Street
52 Redesign the intersection of Water/Carrall /Powell / Alexander
53 Increase the space for pedestrians and landscaping on Columbia Street between Powell Street and Alexander Street



This Summary Report has dealt mostly with the what and where of the changes that the DTP recommends to the road, pedestrian, cycling, and transit networks. Equally important is how the City plans to put these recommendations into practice.

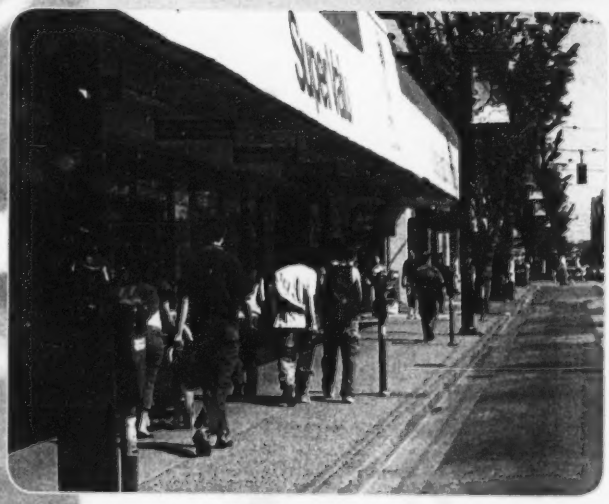
The City has dedicated staff and resources to implement 83 specific improvements – or steps to improvements – to achieve the recommendations made by the DTP. The current implementation schedule calls for these items to be completed by 2005. The Plan also recommends other projects that will take longer to complete, such as developing a communication program to promote alternative transportation and a comprehensive downtown public realm plan.

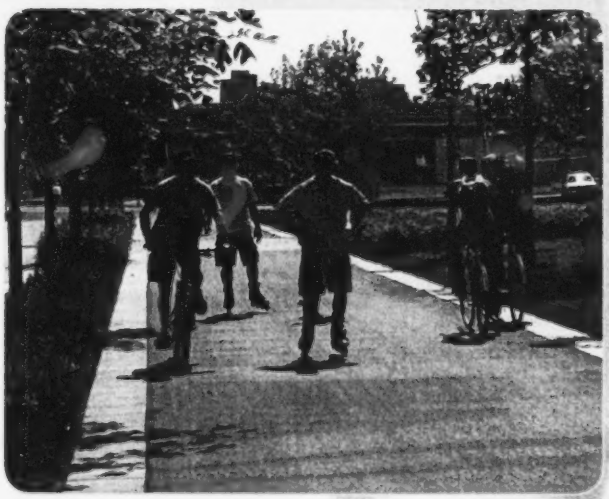
Here are some examples of changes in store for the road network, cyclists, pedestrians, transit riders, goods movement, and parking within the next few years.



Pedestrian

- Detailed design and reconstruction of Pacific Boulevard/Street (Burrard to Nelson)
- Review and explore mid-block crossings at selected locations
- Develop/implement new sidewalk lane crossings at selected locations
- Design/implement pedestrian way-finding signage system
- Widen crosswalks with high pedestrian volumes at select locations
- Install automatic traffic detection devices downtown
- Design Helmcken/Comox Street Greenway
- Design Lagoon Drive Greenway with Park Board
- Design the Downtown Historic Trail Walk through Chinatown, Gastown, and Yaletown
- Develop street design guidelines for Burrard Street and for Hastings Street (Granville to Main)
- Update street design guidelines for Georgia Street
- Review and amend sidewalk weather protection guidelines





Transit

- Initiate the False Creek Flats Transportation Study in coordination with a rail study
- Develop Area Transit Plan with TransLink
- Redesign Granville Street
- Review Street Management and Programming along Granville Street
- Review and implement bus bulges at selected locations

Cyclists

- Design and implement the Pender-Adanac Bike connection, bike lanes on Burrard Street, Pacific and Expo Boulevards, Hornby Street, and Pender/Dunsmuir Streets; construct bike lanes on Georgia Street west of Pender and design bike lanes on Carrall Street
- Design and implement bike lanes on Beatty Street, design bike lanes on Richards Street, design the Chilco Street Bikeway, the Cardero Street Bikeway, and design bike lanes on Alberni/ Jervis/Haro Streets

Road Network

- Reconstruct Georgia Street west of Nicola and S-Curve
- Convert Carrall Street between Hastings and Pender, Abbott Street north of Pender to two-way streets
- Redesign Maple Tree Square (intersection of Carrall/Powell/Water/Alexander Streets)
- Convert Beatty, Cambie, and Homer Streets to 2-way streets
- Develop streetscape design guidelines along Hornby, Pender, Main, Denman, Burrard, Georgia, and Hastings Streets
- Develop communication programs to promote alternative transportation

Parking

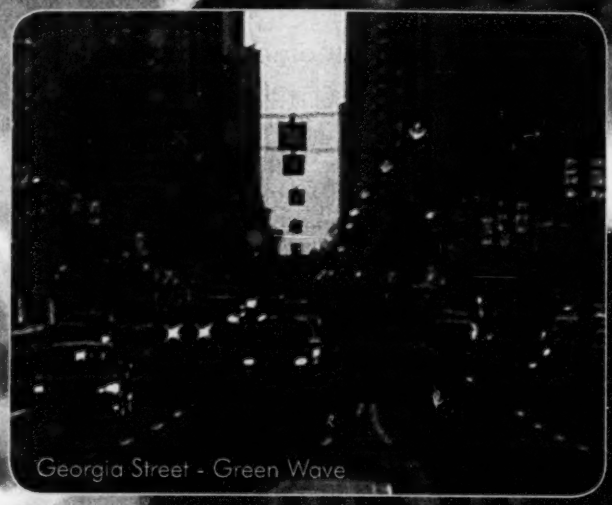
- Renovate Gastown parkade to animate street frontage
- Adjust select on-street parking regulations as detailed in the Plan

Goods Movement

- Amend truck routes as detailed in the Plan
- Review parking by-law truck loading requirements
- Establish an education program for managing tour buses

Slower Speeds, Smoother Flow

The City already coordinates most downtown traffic signals to give drivers sequential green lights – a "green wave" – along some major streets. These signals are set to produce a green wave of 50 kmh. That speed can be uncomfortable for pedestrians and cyclists – and trying to keep up with the wave can lead some drivers to speed up. The DTP recommends timing traffic signals to produce a green wave of 40 kmh or less, which will make catching green lights easier for drivers – and more comfortable for cyclists



Georgia Street - Green Wave

Intelligent Transportation Systems (ITS)

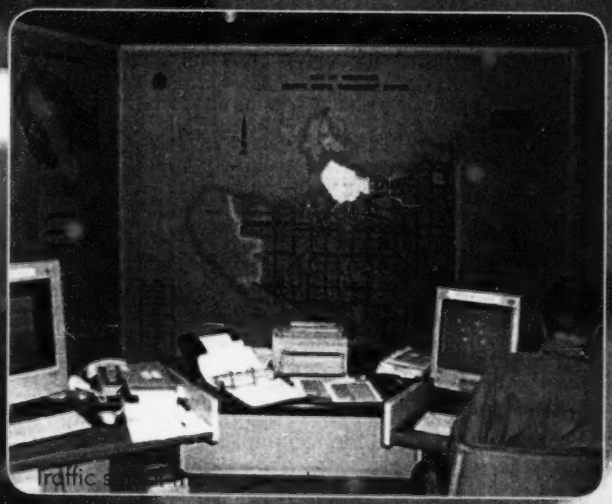
Intelligent Transportation Systems (ITS) use technology to make moving people and goods safer and more efficient. Vancouver already has many ITS applications, including a new traffic signal management system that coordinates the City's 650 traffic lights, audible and tactile push buttons for hearing or visually impaired pedestrians, and electronic fare boxes on transit, and signal priority measures for 98-B Line buses. New ITS applications the DTP recommends include:

- microwave detection at intersections to give priority to pedestrians, cyclists, or buses.
- an adaptive traffic control signal system that continuously evaluates conditions and automatically adjusts signal times accordingly.
- providing real-time, up-to-the-minute transit schedule information at all bus stops and on the Internet.
- use of wireless technology or smart cards to manage parking meters.

Real-time transit information

One-Way or Two-Way for the Best Way

Changed street directions will be one of the most visible changes to the road network. Some one-way streets will become two-way streets. The changes depend on balancing the needs of pedestrians, cyclists, transit riders, and drivers. One-way streets are good for traffic flow and reducing congestion at intersections. Two-way streets usually slow traffic, provide more direct routes to destinations and improve accessibility. For the most part, the DTP leaves downtown's major circulation streets unchanged. Most of the changes involve lower volume streets where livability and accessibility are also important issues.



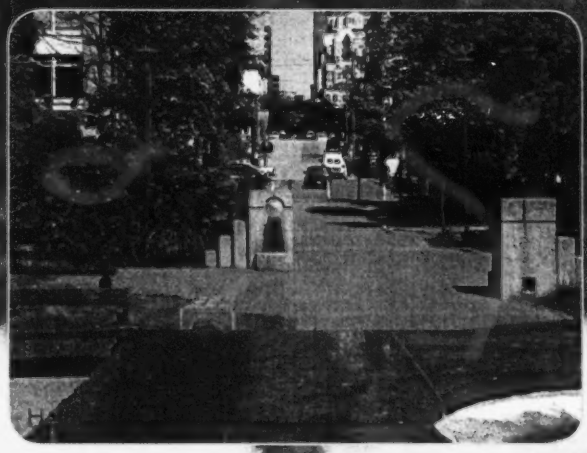
Traffic s[illegible]

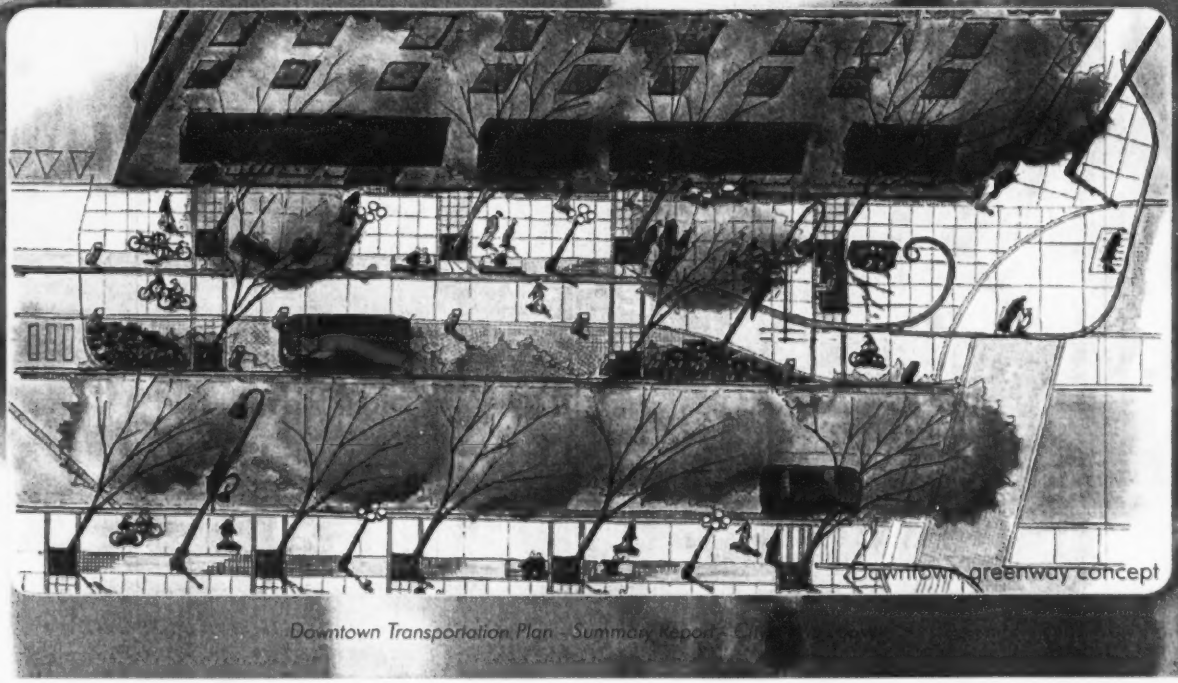
Carrall Street Greenway

Imagine how pleasant it would be to be able to walk, bike, or roller blade all the way around downtown. Taking in the fresh sea air. Stopping for a sip of water. Ducking into a shop or café. Or taking a breather on a park bench in the shade and watching the world go by. Carrall Street's location at the "neck" of the downtown peninsula makes it a key piece in completing the seaside bike route and greenway that will encircle the downtown. A safer, greener Carrall Street would not only link the seawall on the north side of False Creek to a future seawall along the Burrard Inlet, but also support the revitalization of Gastown and Chinatown.

Helmcken Greenway

Imagine being able to walk all the way from Stanley Park to Yaletown on streets redesigned to put pedestrians first and you have the Helmcken/Comox Greenway in a nutshell. Recommended elements in the redesign include new landscaping, public art, street furniture, pedestrian bulges that let drivers see pedestrians more easily, and pedestrian-friendly lighting and improved signage. The Dutch have a name for this Granville Island type arrangement where pedestrians come first and traffic second. They call them "woonerfs." From Yaletown, the Greenway connects to the False Creek ferry system and the Seaside and Central Valley Greenways – all the way to Burnaby's Central Park.





Downtown greenway concept

Downtown Transportation Plan – Summary Report – City

Pacific Boulevard

The new residential neighbourhoods of Yaletown and Downtown South didn't exist when Pacific Boulevard was created on the former Expo lands along downtown's southeast section that skirts False Creek between the Cambie and Burrard Bridges. While the Boulevard's broad expanse may have served Vancouver's Expo well, it has proven to be pedestrian unfriendly and a real drawback to the area's livability. A redesign calls for the creation of a multi-way boulevard and a 6-metre wide median, which would reduce the 36.5-metre wide pedestrian crossing at Davie Street to two 8-metre crossings.


Pacific Boulevard - rendering

Pender Street Bikeway

Creating a bike route along Pender Street from Cambie Street to Georgia Street will not only let people ride right across downtown, but also provide better bike access from downtown to North Shore communities (via the Lions Gate Bridge) and to Burnaby (via the Adanac Bikeway). Given that it will share space with some of the downtown's busiest transit, vehicle, and pedestrian routes, such a bike route, which could possibly run in one direction on Dunsmuir Street and the other on Pender, requires careful planning. The City, with help from consultants, is working with TransLink to find the best way to make it happen with minimum impact on the other modes.


Pender Street

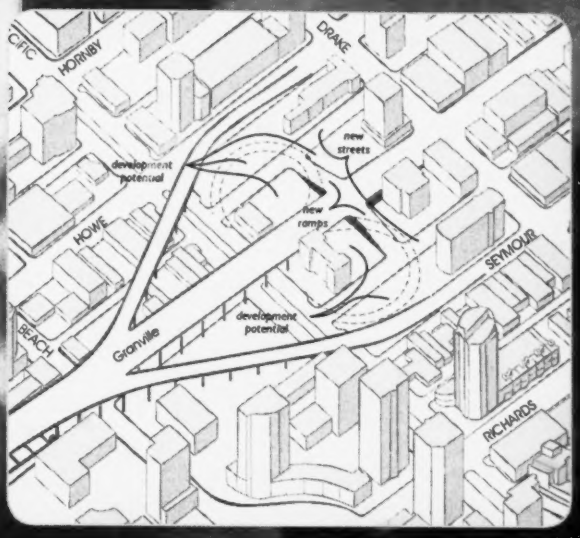
Granville Street

Granville Street is a great street for many reasons. It's one of the most walked streets in Vancouver for business, shopping, entertainment, sightseeing, and simply getting across downtown. It also serves as a major transit route and hub while providing access to downtown for cyclists and some drivers. And it has special historical significance. The DTP, recognizing Granville Street's unique contributions to livability, business vitality, and access, proposes that it also be developed as a Greenway. Furthermore, the Granville Street Redesign Project, with a special design team led by one of North America's most accomplished street designers, is creating a conceptual plan for the entire downtown length of Granville Street from the Granville bridgehead to Cordova Street. The goal is to rejuvenate, refurbish, and restore the street to its former glory.


Granville Street

Granville Loops

This concept for redesigning the Granville Bridge loops is an example of the integrated thinking behind the DTP's recommendations. The redesign would bring multiple benefits that are both good for livability – and business vitality. It would provide better and safer access for cars, pedestrians and cyclists through the two blocks spanning the north end of the Granville Bridge, as well as improved options for commercial and residential development.



Waterfront Station - "Hub"

At the north end of Granville Street a new transportation "Hub" at Waterfront Station will integrate transit lines, commuter trains, SeaBus, streetcars, and bus routes, as well as pedestrian and passenger links to Vancouver's cruiseship docks and the new convention and exposition centre.


Waterfront Station

Thurlow Street

A series of corner bulges along Thurlow Street between Nelson Street and Pacific Street will enhance the pedestrian experience and provide a degree of traffic calming in and around Davie Village. Bulges at busy intersections like Davie and Thurlow will create more standing and walking room. All bulges will provide more opportunities for landscaping and will shorten the crossing distance across Thurlow Street.

Burrard Street Bike and Bus Lanes

A combination of bicycle and bus lanes will be added to Burrard Street. Cyclists will have easy and comfortable access to the Burrard Street Bridge and directly into the heart of the business district. North and southbound bus lanes will allow local and express buses quicker access to the downtown, especially when traffic volumes are high.


Thurlow Street


Burrard Street

In all, the Downtown Transportation Plan makes 81 recommendations in 11 different categories, including those for the four major plan components: the road network, cycling, walking, and transit. Many proposed changes can be started within three years. Some, such as providing wider crosswalks, could be completed within three years. Others, like bike paths, can be started immediately. The entire bike network may take several years to complete. Here are recommendation highlights from the four major plan components:

Road Network Plan (10 Recommendations)

- Convert Carrall, Abbott, Beatty, Cambie, and Homer to two-way streets.
- Reconfigure Granville south of Smithe to improve traffic circulation, widen sidewalks, and reduce conflicts.
- Widen roadways at specified locations to facilitate vehicle circulation, bus movements, and bike lanes.

Transit (20 Recommendations)

- Support the development of a rapid transit line from downtown Vancouver to Richmond (and possibly the airport).
- Use easy-to-read colour-coded maps at bus stops to clearly describe the downtown circulator bus routes.
- Operate downtown circulator bus routes in both directions on the same street and use electric trolley buses wherever possible.
- Extend the proposed Pacific Boulevard streetcar line along Drake Street to Granville Street.
- Extend new streetcar routes to the False Creek Flats and Vanier Park.
- Extend the westbound 3:00 to 7:00 pm HOV lane on Georgia Street east from Burrard to Richards Street.
- Enhance streetscape design of Granville Street from the bridgehead to Cordova Street to improve pedestrian/ transit stops.
- Pursue changes on Cordova Street in front of Waterfront Station to create additional bus stops, a bus-only lane on Cordova, and accommodate a streetcar station.

Pedestrian Plan (19 Recommendations)

- Implement the Pedestrian Route Network as illustrated on page 11 and adopt the Great Street Network as illustrated on page 14
- Provide curb ramps that align with the crosswalks at each intersection
- Provide mid-block crossings near significant pedestrian generators where safe and where direct connections are desired.
- Create improved sidewalk crossings at lanes to provide greater pedestrian priority.
- Design and implement a universal downtown way-finding system of pedestrian signage.
- Provide pedestrian weather protection on retail commercial (high) streets.
- Provide wider crosswalks at intersections with high pedestrian volumes.
- Remove pedestrian holds to give pedestrians greater priority where vehicle volumes will not result in significant turning queues.

Bicycling Plan (7 Recommendations)

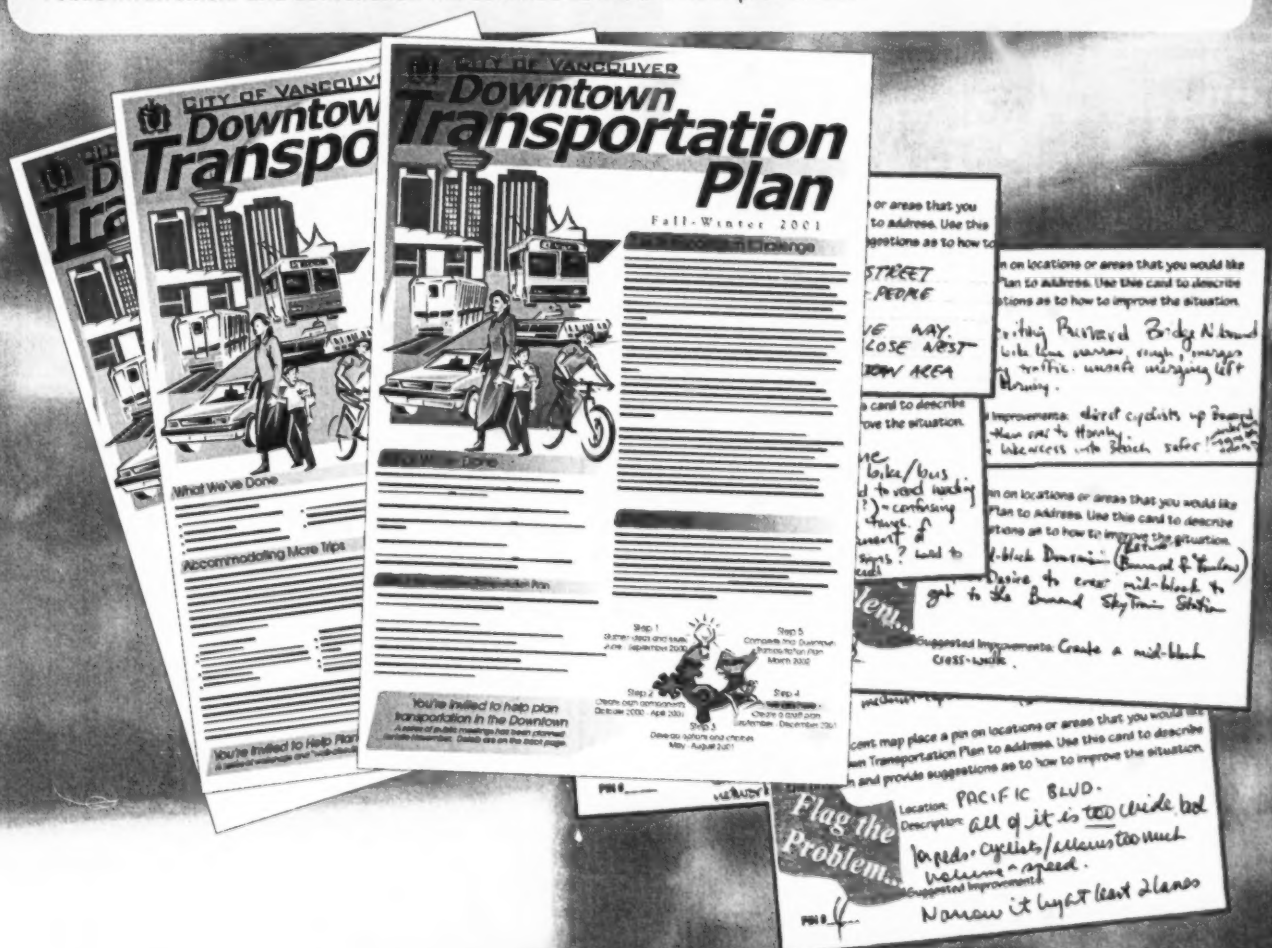
- Implement the Downtown Bicycle Network as shown on page 22
- Upgrade False Creek bridges to better accommodate bicycles.
- Provide related bike facilities to encourage and make bicycling safer (e.g. bike parking facilities, way-finding/ destination signage, education)
- Create bicycle friendly streets along all local streets within the downtown.
- Design all new streets and multi-use paths to adequately accommodate cycling.

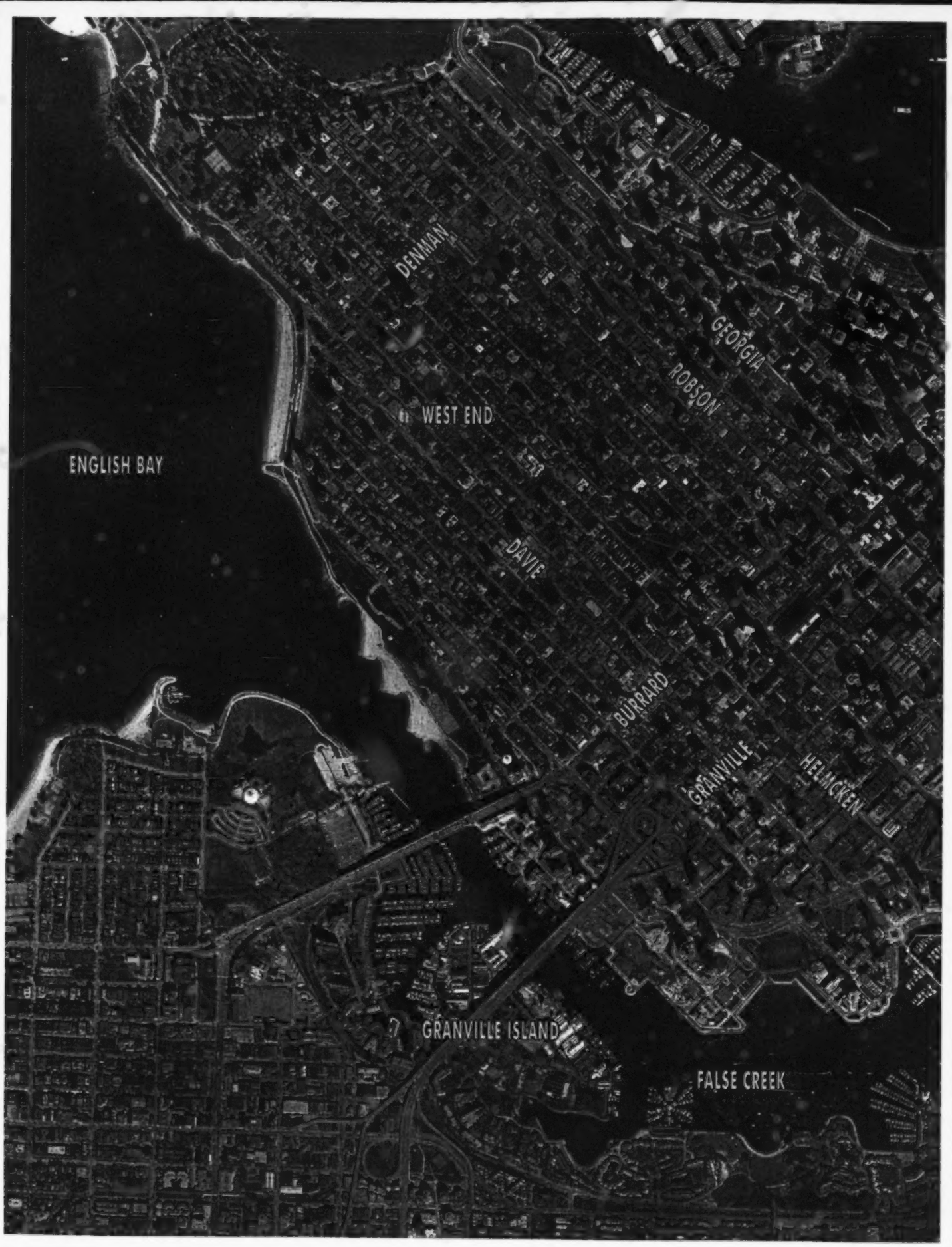
Just as the DTP provides a comprehensive solution to downtown transportation, the public consultation that accompanied its development invited comprehensive input from individuals, business people, community representatives, transportation advocates, stakeholder groups, and advisory bodies. The process was very much a two-way street. It began with a June 2000 Open House and the first of three newsletters that were distributed citywide. Each of the newsletters provided information on the DTP at its particular stage of development and included a questionnaire that asked for public input on the issues. The responses -- from more than 1,500 people -- served as a guide in taking the plan to the next stage.

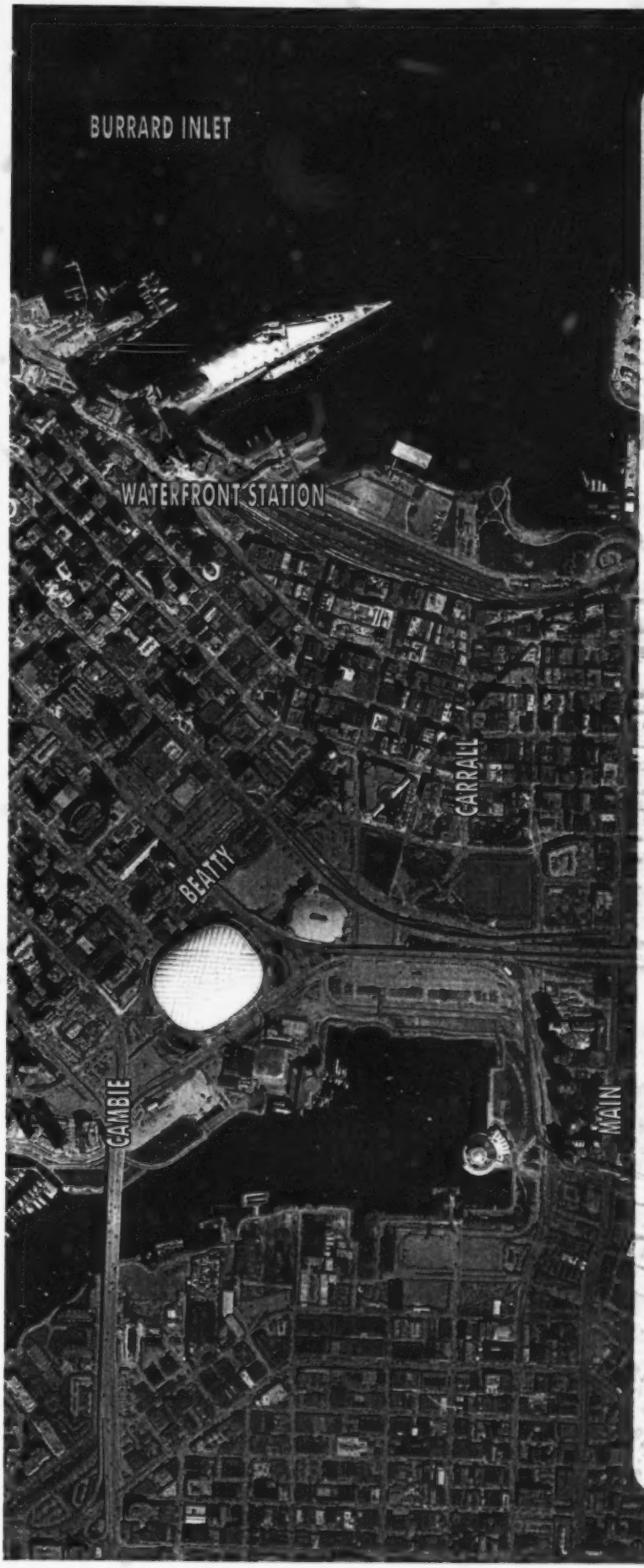
The DTP team also held 16 area- and issue-specific public workshops, as well as neighbourhood "walkabouts" to get a firsthand feel for local issues and concerns. Participants detailed their comments and also "flagged the problem" on cards (a few of which are shown below) to bring additional concerns to the DTP team's attention. Many of the Spot Improvements noted on page 32 came directly from participant submissions.

In addition to the newsletters and workshops, the DTP used local TV and radio, brochures, mobile displays, a web site, and email to keep people informed and involved in the process. A January 2002 Ipsos Reid telephone survey of 900 randomly selected downtown residents, businesses and commuters showed that they generally supported the DTP. They believe it will improve traffic flow, relieve congestion, and make getting around downtown better for those on foot or bikes.

Public involvement and consultation will continue as the DTP is implemented.




DENMAN
GEORGIA
ROBSON
WEST END
ENGLISH BAY
DAVIE
BURRARD
GRANVILLE
HELMCKEN
GRANVILLE ISLAND
FALSE CREEK



Downtown Transportation Plan Steering Committee (1999-2002)

Mayor Philip Owen
Councillor Gordon Price
Councillor Fred Bass
Judy Rogers, City Manager
Dave Rudberg, General Manager of Engineering Services
Larry Beasley, Director of Current Planning
Ann McAfee, Director of City Plans
Ian Adam, Assistant City Engineer, Transportation

Downtown Transportation Plan Project Team (1999-2002)

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Jeffrey Patterson, Senior Planner
Ian Fisher, Engineering Services
Richard Johnson, Planning
Lon LaClaire, Engineering Services
John Madden, Planning
Dean McKay, Community Services
Katia Robichaud, Engineering Services

DTP Implementation Team (2003 - present)

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Jeffrey Patterson - Planning
Nicky Hood - Engineering
Richard Johnson - Planning
Brigid Kudzius - Engineering
Eric Lott - Planning
Dean McKay - Engineering
Jennifer White - Engineering
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04/05

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